



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

355-A Deadmore Street, Abingdon, Virginia 24210

Phone (276) 676-4800 Fax (276) 676-4899

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Jeffrey Hurst
Regional Director

April 19, 2017

Mr. Raymond L. Evans
Vice President, Environmental and Technologies
Buchanan Generation, Inc.
c/o FirstEnergy Inc.
800 Cabin Hill Drive
Greensburg, PA 15601

Location: Buchanan County, VA
Registration No. 11390

Dear Mr. Evans:

Attached is a significant modification to the April 29, 2014 permit (as amended September 23, 2014) to operate your facility pursuant to 9 VAC 5 Chapter 80 Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution. The purpose of this permit modification is to renew the Phase II Acid Rain permit for your facility and incorporate it into your Article 3 federal operating permit. The renewed Acid Rain permit will be effective from April 19, 2017 through April 18, 2022. This modified Article 3 federal operating permit replaces the federal operating permit issued April 29, 2014 (as amended September 23, 2014).

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all conditions carefully.

In evaluating the permit modification request and arriving at a final decision for approval, the Department deemed the application complete on February 22, 2017.

This permit modification approval does not relieve Buchanan Generation, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Mr. Raymond L. Evans
April 19, 2017
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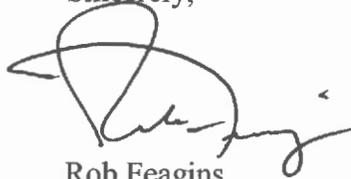
Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the thirty day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact me at (276) 676-4835.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Feagins', with a large, stylized initial 'R'.

Rob Feagins
Air Permit Manager

GRF/TMD/11390_015_17-T5Mod.docx

Attachments: Permit

cc: Director, OAPP (electronic file submission)
Director, Office of Permits and Air Toxics (3AP10), U.S. EPA, Region III
(electronic file submission)



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Federal Operating Permit

Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, 9 VAC 5-80-360 through 9 VAC 5-80-700, 9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 9 VAC 5-140-5010 et seq. of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Buchanan Generation, LLC (c/o FirstEnergy Inc.)
Facility Name:	Buchanan Generating Facility
Facility Location:	Off State Route 2, SW of Marvin
DEQ Registration No:	11390
Permit Number:	SWRO11390
Effective Date:	April 29, 2014
Amendment Date:	September 23, 2014
Modification Date:	April 19, 2017
Expiration Date:	April 28, 2019

Jeffrey Hurst, Director – Southwest Regional Office
Department of Environmental Quality

Attachments: Table of Contents, 2 pages
Permit Conditions, 23 pages

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Federal Operating Permit Table of Contents

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I. Facility Information

Permittee

Buchanan Generation, LLC
c/o FirstEnergy Inc.
800 Cabin Hill Drive
Greensburg, PA 15601

Responsible Official

William H. Harker
Executive Director, North Fleet & CT/Hydro Ops

Contact Person

Mark A. Sowa
Supervisor, Air Permitting
FirstEnergy Inc.
(724) 838-6133

Acid Rain Program
Designated Representative

Raymond L. Evans
Vice President, Environmental Services
USEPA ATS-AAR ID: #17

NO_x Authorized Account Representative
Alternate Designated Representative

Raymond L. Evans
Vice President, Environmental Services
USEPA ATS-AAR ID: #17

DEQ Plant Identification Number: 51-027-00148

NATS Facility Identification Number (ORIS Code): 055738

Facility Description: SIC 4911 - Electric Services
NAICS 221112 - Fossil Fuel Electric Power Generation

Buchanan Generation is a peaking electric power generation facility. It consists of two General Electric LM6000PC SPRINT simple cycle gas turbine generator sets, using coal seam methane gas, similar to pipeline quality natural gas, exclusively as a fuel. Each turbine has a maximum heat input of 424.6 MMBtu/hr, with a rated peak load of 50.58 MW output. The facility also includes two oil/water separators, each with a maximum hourly throughput of 15,000 gallons of water per hour.

II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity *	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
1	S001	General Electric LM 6000PC SPRINT gas turbine	424.6 MMBtu/hr	Water Injection	W101	NOx	1/13/2002 (as amended 9/03/2002, 11/14/2002 and 9/26/2003)
2	S002	General Electric LM 6000PC SPRINT gas turbine	424.6 MMBtu/hr	Water Injection	W102	NOx	

* Note: The size/rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Fuel Burning Equipment Requirements – (emission unit ID# 1 and 2)

A. Limitations

1. Nitrogen oxide (NO_x) emissions from each combustion turbine shall be controlled by the use of water injection. When fuel is fired in a combustion turbine, water shall be injected into the combustion turbine to control nitrogen oxide emissions. The rate of water injection shall be at least that established during emissions tests as being sufficient to meet the emissions standards set forth in this permit.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 5 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
2. Sulfur dioxide and particulate matter (PM) emissions from each combustion turbine and the heater shall be controlled by the use of coal seam methane gas fuel, with maximum sulfur content not to exceed 0.8 percent by weight. The annual average sulfur content of the coal seam methane gas fuel shall not exceed 0.5 grains per 100 dry standard cubic feet per year, calculated monthly as the average of each consecutive 12 month period.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-20, 9 VAC 5-50-260 and Condition 4 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
3. The approved fuel for the combustion turbines is coal seam methane gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-260, and Condition 9 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
4. Carbon monoxide, volatile organic compound (VOC), PM and formaldehyde emissions from each combustion turbine shall be minimized by the use of good combustion operating practices.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 7 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
5. The permittee shall meet all the applicable requirements of 40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines, except where specifically modified by this permit.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-410 and Condition 3 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
6. The two General Electric LM6000PC SPRINT gas turbine generator sets shall not operate more than a combined total of 13,400 operating hours per year, calculated monthly as the sum of each consecutive 12-month period. The combustion turbines shall consume no more than 5,759 million standard cubic feet (MMSCF) of coal seam methane gas per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-80-490 B & C, and Condition 10 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

7. Emissions from the operation of the two (2) combustion turbines shall not exceed the limits specified below:

<u>Pollutant</u>	<u>(each at base/peak load)</u>	<u>(combined total)</u>
Particulate Matter	3.0 lbs/hr	20.1 tons/yr
PM-10	3.0 lbs/hr	20.1 tons/yr
Carbon Monoxide	51.0 lbs/hr	120.6 tons/yr
Nitrogen Oxides (as NO ₂)	(25 ppmvd*) 39.0 lbs/hr	247.9 tons/yr
Volatile Organic Compounds	4.0 lbs/hr	8.2 tons/yr
Sulfur Dioxide	2.5 lbs/hr	16.8 tons/yr
Regulated Hazardous Air Pollutants (as VOC)		
Formaldehyde	1.1 lbs/hr	7.4 tons/yr

* (ppm by volume, one hour average at 15% oxygen as a dry sample and at ambient pressure, as measured per EPA Methods 7E and 10 of 40 CFR 60 Appendix A)

The approved methods for determining compliance with this condition include compliance with conditions III.A.1 - 6 and III.B.1, or DEQ-approved source emission tests. DEQ reserves the authority to require source emission tests for any regulated air pollutant. (9 VAC 5-80-110, 9 VAC 5-50-180, 9 VAC 5-50-260, 9 VAC 5-80-490 B & C, 9 VAC 5-50-410, and Condition 14 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

8. Visible emissions from each combustion turbine exhaust stack shall not exceed ten (10) percent opacity as determined by EPA Method 9 (Reference 40 CFR, Appendix A). This condition applies at all times except during start-up, shutdown or malfunction. (9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 16 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
9. Emissions of nitrogen oxides from the operation of each combustion turbine shall not exceed 121.9 ppmvd as a one hour average at 15% oxygen, adjusted to International Standards Organization (ISO) standard ambient conditions in accordance with Subpart GG of the NSPS. The permittee shall provide hourly average records of the ambient temperature, ambient humidity, and combustor inlet pressure so that the NO_x emissions data can be corrected to ISO standard ambient conditions, upon the request of the DEQ, in order to demonstrate compliance with this emission standard. The permittee shall expeditiously repair or replace ambient monitoring instrumentation in the event of instrument malfunction. In the event of malfunction, equivalent data may be provided from local representative meteorological sources. (9 VAC 5-80-110, 9 VAC 5-50-50, 9 VAC 5-50-410, 9 VAC 5-80-490 B & C, 9 VAC 5-170-160, and Condition 15 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
10. Excess emissions from startup, shutdown or malfunction may be permitted, if best operational practices are followed, and if at all times the permittee maintains and operates to the extent practicable, the affected facility, including associated air pollution equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

Allowable episodes of excess emissions from startup, shutdown or malfunction shall in no case exceed 1.0 hours in any 24-hour period, unless specifically authorized by DEQ for longer duration. Excess emissions from startup and shutdown shall be included in total annual facility emissions as determined from data from continuous monitoring systems. (9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-80-490 B & C, and Condition 17 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

B. Monitoring

1. Continuous monitoring systems (CEMS) shall be operated and maintained to monitor and record emissions of nitrogen oxides (measured as NO₂), as ppmvd corrected to 15% O₂, from the combustion turbines. The CEMS shall be calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 75.
(9 VAC 5-80-110, 9 VAC 5-80-490 B & C, 9 VAC 5-50-20, 9 VAC 5-50-40, 9 VAC 5-50-50, 9 VAC 5-80-420 and Condition 6 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
2. Continuous monitoring systems shall be installed and operated to monitor and record the fuel consumption in each turbine. These monitoring systems shall be operated at all times and shall be accurate to within ± 5.0 percent. The systems shall be maintained and calibrated in accordance with manufacturer's specifications. As a minimum, the monitoring systems shall be inspected at least annually. The permittee shall maintain the records of fuel consumption at the site. These records shall be kept on file for the most current five year period and available for inspection by DEQ personnel.
(9 VAC 5-80-110, 9 VAC 5-50-20, 9 VAC 5-50-40, 9 VAC 5-50-50, 9 VAC 5-80-490 E and Condition 11 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
3. The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110, 9 VAC 5-80-490 E & F, 9 VAC 5-50-30 and Condition 8 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))
4. A Visible Emission Evaluation (VEE) in accordance with 40 CFR, Part 60, Appendix A, Method 9, shall be conducted on each combustion turbine stack at base load each time a Relative Accuracy Test Audit (RATA) is performed for the CEMS, in order to determine compliance with the opacity limit specified in Condition III.A.8. Each test shall consist of 10 sets of 24 consecutive observations (at 15 second intervals) to yield 6 minute averages. Should conditions prevent concurrent opacity observations, the Director, Southwest Regional Office shall be notified in writing, within 7 days, with visible emissions testing to be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the Relative Accuracy Test Audit. A copy of the test result shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall include, at a minimum, any data required by 40 CFR 60, Appendix A, Method 9. The permittee shall also maintain a record of each VEE and any corrective actions, including, at a minimum, any data required by 40 CFR 60, Appendix A, Method 9.
(9 VAC 5-80-110 and 9 VAC 5-80-490 E & F)

5. The permittee shall monitor the sulfur content of the coal seam methane gas being fired in the combustion turbines, in accordance with Subpart GG of the NSPS and subsection (a) below. The permittee shall comply with the custom fuel sulfur monitoring schedule contained in subsections (b) and (c) of this condition. The permittee may submit subsequent custom fuel sampling schedules through the DEQ for EPA approval. The permittee shall maintain records certifying the sulfur content of the gas.
 - a. Analysis for the sulfur content of the coal seam methane gas shall be conducted as referenced in 40 CFR 60.334(b)(2), using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels or an approved alternative method. The approved reference methods are: ASTM D1072-80, D4084-82, or D3246-81. Fuel vendor analyses by these methods may be used.
 - b. Sulfur monitoring shall be conducted at least once per quarter.
 - c. Should any sulfur analysis required in paragraph B above indicate noncompliance, the permittee shall notify the Southwest Regional Office. Sulfur monitoring shall be conducted each day the turbines operate during an interim period when this custom schedule is being reexamined due to noncompliance, and the results may be submitted to show compliance.
 - d. If there is a change in fuel supply, the permittee must notify the Director, Southwest Regional Office of such change for reexamination of this custom schedule. A change in fuel quality may be deemed a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being reexamined.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-410, 9 VAC 5-80-490 E, 9 VAC 5-170-160 and Condition 18 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03)

C. Recordkeeping

1. The permittee shall maintain records of all emission data and operating parameters for the gas turbine generator sets necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
 - a. The combined fuel consumption of the two combustion turbines, calculated monthly as the sum of each consecutive 12-month period;
 - b. The number of combined annual unit operating hours, calculated monthly as the sum of each consecutive 12-month period;
 - c. All the fuel analysis reports for sulfur content in accordance with condition III.B.5.;
 - d. Annual NO_x emission reports, calculated daily as the sum of each consecutive 365-day period; and
 - e. Any visual observations and visual emissions evaluations of the combustion turbine exhaust stacks.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-50-50, 9 VAC 5-80-490 C & F, and Condition 19 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

2. In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of 5 years and shall be made available to DEQ personnel upon request, and
 - b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.
 (9 VAC 5-80-110, 9 VAC 5-50-20 E, 9 VAC 5-80-490 C & F, 9 VAC 5-170-160, and Condition 24 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

3. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided, including names of trainees, date of training and nature of training.
 (9 VAC 5-80-110, 9 VAC 5-80-490 C & F, 9 VAC 5-170-160 and Condition 25 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25a
NO _x	EPA Methods 7E, 20
CO	EPA Method 10
PM/PM-10	EPA Methods 5, 201A, 202
Visible Emissions	EPA Method 9

E. Reporting

Quarterly reports of excess emissions shall be submitted to the Director, Southwest Regional Office in accordance with 40 CFR Part 60, Section 7(c). The report shall be postmarked by the 30th day following the end of the calendar quarter. In addition to the information required by 40 CFR Part 60, Section 7(c), each report shall include the average fuel consumption, ambient conditions and gas turbine load during the period of excess emissions. For the purpose of this report, periods of excess emissions are defined as follows:

1. Any one hour period (excluding the 1-hour allowance during a 24-hour period for startup, shutdown or malfunction) during which the continuous emission monitoring system, exceeds the nitrogen oxide ppmvd limits specified in Condition III.A.7.
2. Any period during which the sulfur content of the natural gas being fired in the gas turbines exceeds 0.8 percent by weight.
3. Operating hours when monitoring data is not available.
 (9 VAC 5-80-110, 9 VAC 5-50-20, 9 VAC 5-50-50, 9 VAC 5-50-410, 9 VAC 5-170-160, 9 VAC 5-80-490 F, and Condition 13 of 1/31/02 NSR Permit (as amended 9/3 and 11/14/02 and 9/26/03))

IV. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutants Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
T1	Unit 1 – Turbine Lube Oil Tank	5-80-720 C.3	VOC	200 gal
T2	Unit 1 – Generator Lube Oil Tank	5-80-720 C.3	VOC	500 gal
T3	Unit 1 – Hydraulic Oil Tank	5-80-720 C.3	VOC	50 gal
T4	Unit 2 – Turbine Lube Oil Tank	5-80-720 C.3	VOC	200 gal
T5	Unit 2 – Generator Lube Oil Tank	5-80-720 C.3	VOC	500 gal
T6	Unit 2 – Hydraulic Oil Tank	5-80-720 C.3	VOC	50 gal
T7	Oil/Water Separator - Waste Oil Tank	5-80-720 C.3	VOC	150 gal
T8	Oil/Water Separator	5-80-720 B.2	VOC	15,000 gal/hr
T9	Oil/Water Separator	5-80-720 B.2	VOC	15,000 gal/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110 and 9 VAC 5-80-490 C, E, and F

V. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the

following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Non-Applicability
NESHAP Subpart YYYY	Stationary Combustion Turbines	Currently only applies to new sources at a major source of Hazardous Air Pollutants (HAPS)

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140 and 9 VAC 5-80-500)

VI. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9 VAC 5-80-110 N and 9 VAC 5-80-490 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of this permit. Unless a timely and complete renewal application consistent with 9 VAC 5-80-80 and 9 VAC 5-80-430, has been submitted, to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, and Article 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150 and 9 VAC 5-80-510.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 and subsections C and D of 9 VAC 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80, and Article 3, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 and section 9 VAC 5-80-430 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC

5-80-140 and 9 VAC 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F.1 and F.5 (ii) of section 9 VAC 5-80-80 F, and subsections F.1 and F.5 (ii) of section 9 VAC 5-80-430, shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D and section 9 VAC 5-80-430 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D, 9 VAC 5-80-170 B, 9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The dates analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-110 F and 9 VAC 5-80-490 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F and 9 VAC 5-80-490 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-430 G and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 1. Exceedance of emissions limitations or operational restrictions;
 2. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

3. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”
(9 VAC 5-80-110 F and 9 VAC 5-80-490 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit, or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit, including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with VAC 5-80-430 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
3. The identification of each term or condition of the permit that is the basis of the certification.
4. Consistent with subsections 9 VAC 5-80-110 E and 9 VAC 5-80-490 E, the method or methods used for determining the compliance status of the source at the time of certification and over the certification period.
5. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
6. The status of compliance with the terms and conditions of this permit for the certification period.
7. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029
(9 VAC 5-80-110 K.5 and 9 VAC 5-80-490 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Southwest Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VI.C.3. of this permit.
(9 VAC 5-80-110 F.2, 9 VAC 5-80-250, and 9 VAC 5-80-490 F.2)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Region.
(9 VAC 5-20-180 C)

1. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the two week written notification.
2. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-50-50 C are listed below:
 - a. 1
 - b. 2
3. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable emission standard) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;

- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.
(9 VAC 5-20-180 C and 9 VAC 5-50-50)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1 and 9 VAC 5-80-490 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-110 G.2 and 9 VAC 5-80-490 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3 and 9 VAC 5-80-490 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-490 L, 9 VAC 5-80-490 L, 9 VAC 5-80-640 and 9 VAC 5-80-660. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-190, 9 VAC 5-80-260 and 9 VAC 5-80-490 G and L)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5 and 9 VAC 5-80-490 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6 and 9 VAC 5-80-490 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G and 9 VAC 5-80-430 G.
(9 VAC 5-80-110 K.1 and 9 VAC 5-80-490 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 or 9 VAC 5-80-360 through 9 VAC 5-80-700 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-490 H)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-20 E, 9 VAC 5-50-90, and 9 VAC 5-50-50)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-40-20 E, and 9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 and 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario.

The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1 and 9 VAC 5 Chapter 80 Article 3.

(9 VAC 5-80-110 J and 9 VAC 5-80-490 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents, as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2 and 9 VAC 5-80-490 K.2)

R. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable

requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F and 9 VAC 5-80-430 F.

1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.
(9 VAC 5-80-110 L and 9 VAC 5-80-490 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E and 9 VAC 5-80-510 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160 and 9 VAC 5-80-520)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200 and 9 VAC 5-80-560.
(9 VAC 5-80-160 and 9 VAC 5-80-520)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200 and 9 VAC 5-80-560.
(9 VAC 5-80-160 and 9 VAC 5-80-520)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b and 9 VAC 5-80-490 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250 and 9 VAC 5-80-650)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto, or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80, Article 1, and 9 VAC 5 Chapter 80, Article 3. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C, 9 VAC 5-80-260, 9 VAC 5-80-490 G and L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submits such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become

applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E and 9 VAC 5-80-430 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A - F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I and 9 VAC 5-80-490 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110 and 9 VAC 5-80-490, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 and 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300 and 9 VAC 5-80-360 through 9 VAC 5-80-700.

(9 VAC 5-80-110 I and 9 VAC 5-80-490 I)

VII. Phase II Acid Rain Allowances and Requirements

Phase II Acid Rain Permit - The attached Phase II Acid Rain permit is incorporated into this permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.

(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

VIII. NOx Budget Trading Program Requirements

A. General Conditions

1. A review of the air emission units included in this permit approval has determined that the equipment listed in the following table meets the definition of a NOx Budget Unit and falls subject to the NOx Budget emission limitations under 9 VAC 5-140-40 or for opt-in sources 9 VAC 5-140-800. As required by 9 VAC 5-140-200 A, each NOx Budget source is required to have a federally enforceable permit. This section of the document represents the NOx Budget permit.
(9 VAC 5-140-40)
2. The NOx Budget permit will be administered by the VADEQ under the authority of 9 VAC 5-80-360 et seq., Article 3 and 9 VAC 5-140-10 et seq.
3. The following air emission unit(s) have been determined to meet the applicability requirements as provided in 9 VAC 5-140-40 A.1 and A.2.
(9 VAC 5-140-40 A)

Facility NOx Budget Units				
Facility Unit ID	Unit NATS Code	Unit Name and Description	Maximum Heat Capacity (MMBtu/hr)	Maximum Generation Capacity (megawatts)
1	055738-000001	General Electric LM 6000PC SPRINT gas turbine	424.6	50.58
2	005738-000002	General Electric LM 6000PC SPRINT gas turbine	424.6	50.58

4. This NOx Budget permit became effective on May 31, 2004.
(9 VAC 5-140-240.1)

B. Standard Requirements

1. Monitoring requirements.
 - a. The owners and operators and, to the extent applicable, the NOx authorized account representative of each NOx Budget source and each NOx Budget unit at the source shall comply with the monitoring requirements of Part 1, Article 8 (9 VAC 5-140-700 et seq.) of this part.
 - b. The emissions measurements recorded and reported in accordance with (9 VAC 5-140-700 et seq.) (subpart H of 40 CFR part 96) shall be used to determine compliance by the unit with the NOx Budget emissions limitation under paragraphs VIII.B.2.a. through VIII.B.2.h. The following approved methods will be used to calculate NOx emission rates

Pollutant or Stack Parameter	CEMS Monitoring Methods 40 CFR 75
NOx Concentration	USEPA Method 7E
Moisture	USEPA Method 4
Fuel Use / Heat Flow	USEPA Method 19
Diluent Gas	USEPA Method 3A

(9 VAC 5-140-60 B.1 and 9 VAC 5-140-60 B.2)

2. Nitrogen oxides requirements.

- a. The owners and operators of each NOx Budget source and each NOx Budget unit at the source shall hold NOx allowances available for compliance deductions under 9 VAC 5-140-540 A, B, E, or F, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with Article 8 (9 VAC 5-140-700 et seq.) of this part, plus any amount necessary to account for actual utilization under 9 VAC 5-140-420 E for the control period or to account for excess emissions for a prior control period under 9 VAC 5-140-540 D or to account for withdrawal from the NOx Budget Trading Program, or a change in regulatory status, of a NOx Budget opt-in unit under 9 VAC 5-140-860 or 9 VAC 5-140-870.
(9 VAC 5-140-60 C.1)
- b. Each ton of nitrogen oxides emitted in excess of the NOx Budget emissions limitation shall constitute a separate violation of this part, the Clean Air Act, and applicable Virginia Air Pollution Control law.
(9 VAC 5-140-60 C.2)
- c. A NOx Budget unit shall be subject to the requirements under 9 VAC 5-140-60 C.1 starting on May 31, 2004.
(9 VAC 5-140-60 C.3)
- d. NOx allowances shall be held in, deducted from, or transferred among NOx Allowance Tracking System accounts in accordance with Article 5 (9 VAC 5-140-400 et seq.), Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), and Article 9 (9 VAC 5-140-800 et seq.) of this part.
(9 VAC 5-140-60 C.4)
- e. A NOx allowance shall not be deducted, in order to comply with the requirements under 9 VAC 5-140-60 C.1 for a control period in a year prior to the year for which the NOx allowance was allocated.
(9 VAC 5-140-60 C.5)
- f. A NOx allowance allocated by the permitting authority or the administrator under the NOx Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NOx Budget Trading Program. No provision of the NOx Budget Trading Program, the NOx Budget permit application, the NOx Budget permit, or an exemption under 9 VAC 5-140-50 and no provision of law shall be construed to

limit the authority of the United States or the State to terminate or limit such authorization.

(9 VAC 5-140-60 C.6)

- g. A NOx allowance allocated by the permitting authority or the administrator under the NOx Budget Trading Program does not constitute a property right.

(9 VAC 5-140-60 C.7)

- h. Upon recordation by the administrator under Article 6 (9 VAC 5-140-500 et seq.), Article 7 (9 VAC 5-140-600 et seq.), or Article 9 (9 VAC 5-140-800 et seq.) of this part, every allocation, transfer, or deduction of a NOx allowance to or from a NOx Budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx Budget permit of the NOx Budget unit by operation of law without any further review.

(9 VAC 5-140-60 C.8)

3. Excess emissions requirements.

- a. The owners and operators of a NOx Budget unit that has excess emissions in any control period shall:

1. Surrender the NOx allowances required for deduction under 9 VAC 5-140-540 D.1; and

2. Pay any fine, penalty, or assessment or comply with any other remedy imposed under 9 VAC 5-140-540 D.3.

C. Recordkeeping and Reporting Requirements

The following requirements concerning recordkeeping and reporting shall apply:

1. Unless otherwise provided, the owners and operators of the NOx Budget source and each NOx Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

a. The account certificate of representation for the NOx authorized account representative for the source and each NOx Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9 VAC 5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NOx authorized account representative.

b. All emissions monitoring information, in accordance with Article 8 (9 VAC 5-140-700 et seq.) of this part; provided that to the extent that Article 8 (9 VAC 5-140-700 et seq.) of this part provides for a three-year period for recordkeeping, the three-year period shall apply.

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx Budget Trading Program.

d. Copies of all documents used to complete a NOx Budget permit application and any other submission under the NOx Budget Trading Program or to demonstrate compliance with the requirements of the NOx Budget Trading Program.

(9 VAC 5-140-60 E.1)

2. The NOx authorized account representative of a NOx Budget source and each NOx Budget unit at the source shall submit the reports and compliance certifications required under the NOx Budget Trading Program, including those under Article 4 (9 VAC 5-140-300 et seq.), Article 8 (9 VAC 5-140-700 et seq.), or Article 9 (9 VAC 5-140-800 et seq.) of 9 VAC 5 Chapter 10.

(9 VAC 5-140-60 E.2)

D. Emission Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-140-300)

E. Liability

1. Any person who knowingly violates any requirement or prohibition of the NOx Budget Trading Program, a NOx Budget permit, or an exemption under 9 VAC 5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.

(9 VAC 5-140-60 F.1)

2. Any person who knowingly makes a false material statement in any record, submission, or report under the NOx Budget Trading Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.

(9 VAC 5-140-60 F.2)

3. No permit revision shall excuse any violation of the requirements of the NOx Budget Trading Program that occurs prior to the date that the revision takes effect.

(9 VAC 5-140-60 F.3)

4. Each NOx Budget source and each NOx Budget unit shall meet the requirements of the NOx Budget Trading Program.

(9 VAC 5-140-60 F.4)

5. Any provision of the NOx Budget Trading Program that applies to a NOx Budget source or the NOx authorized account representative of a NOx Budget source shall also apply to the owners and operators of such source and of the NOx Budget units at the source.

(9 VAC 5-140-60 F.5)

6. Any provision of the NOx Budget Trading Program that applies to a NOx Budget unit or the NOx authorized account representative of a NOx budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9 VAC 5-140-700 et seq.), the owners and operators and the NOx authorized account representative of one NOx Budget unit shall not

be liable for any violation by any other NOx Budget unit of which they are not owners or operators or the NOx authorized account representative and that is located at a source of which they are not owners or operators or the NOx authorized account representative.
(9 VAC 5-140-60 F.6)

F. Effect on Other Authorities

No provision of the NOx Budget Trading Program, a NOx Budget permit application, a NOx Budget permit, or an exemption under 9 VAC 5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOx authorized account representative of a NOx Budget source or NOx Budget unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.
(9 VAC 5-140-60 G)

IX. Clean Air Interstate Rule (CAIR) Requirements

The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., 9 VAC 5-140-5010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140. The CAIR permit and permit application in attachment B to this document contain specific conditions and expires upon expiration of this Title V permit.
(9 VAC 5-80-110, 40 CFR Part 96, and 9 VAC 5 Chapter 140)

Attachment A

Phase II Acid Rain Permit



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

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Regional Director

PHASE II ACID RAIN PERMIT

Issued To:	Buchanan Generation, LLC c/o FirstEnergy Inc.	Registration No: 11390
Operated By:	Buchanan Generation, LLC	ORIS Code: 55738
Location:	1 mile southwest of Marvin, in Buchanan County, Virginia	Facility ID No. 51-027-00148
Effective Date:	April 19, 2017 through April 18, 2022	

Acid Rain Permit Contents

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- 3) Additional requirements or conditions, and any comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process
- 4) The permit application submitted for this source.

Permit Approval

Approved on: April 19, 2017.

A blue ink signature of Jeffrey Hurst, written in a cursive style.

Jeffrey Hurst
Regional Director

Permit consists of a total of 6 pages (including the attached 4-page permit application).

1. **Statement of Basis.** (9 VAC 5-80-490 B.2)

Statutory and Regulatory Authorities: In accordance with the Air Pollution Control Law of Virginia §10.1-1308 and §10.1-1322, the Environmental Protection Agency (EPA) Final Full Approval of the Operating Permits Program (Titles IV and V) published in the Federal Register December 4, 2001, Volume 66, Number 233, Rules and Regulations, Pages 62961-62967 and effective November 30, 2001, and Title 40, the Code of Federal Regulations §§72.1 through 76.16, the Commonwealth of Virginia Department of Environmental Quality issues this permit pursuant to 9 VAC 5 Chapter 80, Article 3 of the Virginia Regulations for the Control and Abatement of Air Pollution (Federal Operating Permits for Acid Rain Sources).

2. **SO₂ Allowance Allocations and NO_x Requirements for each Affected Unit.**
 (9 VAC 5-80-490 A.4)

Units	1 and 2
Effective Period	April 19, 2017 through April 18, 2022
SO₂ Allowances under Table 2 of 40 CFR 73.10 (tons)	Not Applicable. These units were not eligible for SO ₂ allowance allocations by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program. Therefore, these units have no SO ₂ allowances listed in Table 2 of 40 CFR 73.10. SO ₂ allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of these units to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of each unit remain obligated to hold sufficient allowances to account for SO ₂ emissions from each unit in accordance with 40 CFR 72.9(c)(1).
NO_x Limit	Not Applicable. Gas-fired units are not subject to NO _x limitations under 40 CFR Part 76.

3. **Comments, Notes, and Justifications:** Both Units 1 and 2 are gas-fired and therefore are not subject to NO_x limitations under 40 CFR Part 76.

4. **Acid Rain Permit Application.** The attached permit application is incorporated into the Phase II Acid Rain permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.
 (9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

STEP 3

**Read the
standard
requirements**

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3,
Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Buchanan Generating Facility - Units 1 and 2
 Plant Name (from Step 1)

Step 3,
 Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the
 certification
 statement,
 sign, and
 date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Raymond L. Evans, Vice President, Environmental and Technologies	
Signature 	Date 12/13/2016

Attachment B

Clean Air Interstate Rule (CAIR) Permit



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Molly Joseph Ward
Secretary of Natural Resources

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CLEAN AIR INTERSTATE RULE (CAIR) PERMIT

Issued To: Buchanan Generation, LLC
Operated By: FirstEnergy, Inc

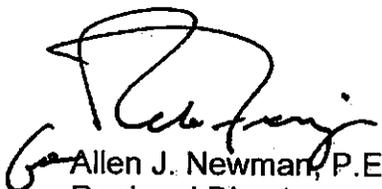
Registration No: 11390
ORIS Code: 55738
Facility ID No: 51-027-00148

Location: Marvin, Buchanan County, Virginia

Permit Requirements:

The permittee shall comply with all applicable Clean Air Interstate Rule (CAIR) requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit Application. This CAIR Permit is incorporated into the Title V permit for this facility and shall be in effect for the same time period as the Title V Permit.

(9 VAC 5-80-490, 40 CFR Part 96 and 9 VAC 5 Chapter 140)



Allen J. Newman, P.E.
Regional Director

The CAIR permit consists of this page and the attached CAIR permit application dated June 25, 2007 (as amended August 22, 2007), and the Title V permit application dated August 9, 2013