



NRO-051-15

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

April 3, 2015

Mr. Edward H. Baine
VP Power Generation System Operations
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

FIPS/Plant ID: 51-061-00061
Location: Fauquier County
Registration No.: 40961
Permit No.: NRO40961

Dear Mr. Baine:

Attached is a Title V permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution (Regulations).

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

This approval to operate does not relieve Virginia Electric and Power Company 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.

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

Mr. Edward H. Baine
April 3, 2015
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In the event that you receive this permit by mail, three days are added to the 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 Gary Beeson at (703) 583-3969.

Sincerely,

James B. LaFratta
Regional Air Permit Manager

TAF/JBL/HGB/NRO-051-15

Attachment: Permit

cc: Mr. Scott Lawton – Director, Electric Environmental Business Support, Dominion Resource Services, Inc. (electronic copy)
Ms. Elizabeth A. Willoughby – Dominion Virginia Power (electronic copy)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic copy)
Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance (electronic copy)



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Article 3 Federal Operating Permit

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 of the State Air Pollution Control Board 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 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 the following:

Permittee Name	Virginia Electric and Power Company
Facility Name	Dominion Remington Combustion Turbine Station
Facility Location	12025 Lucky Hill Rd, Remington, Virginia 22734 Fauquier County
Registration Number	40961
Permit Number:	NRO40961

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Conditions 1 through 80)

April 3, 2015

Title V Permit Effective Date

January 1, 2015

Title IV (Acid Rain) Permit Effective Date

December 31, 2019

Title IV and Title V Permit Expiration Date

Thomas A. Faha
Regional Director

Signature Date

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Affected Source Information

Permittee

Virginia Electric and Power Company
DBA, Dominion Remington Combustion Turbine Station
5000 Dominion Boulevard
Glen Allen, VA 23060

Responsible Official

Mr. Jeffery Heffelman
Power Generation Station Director
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Acid Rain Designated Representative

Mr. Edward H. Baine
Vice President Power Generation System Operations
USEPA AIRS ID – 5106100061

Alternate Acid Rain Designated Representative

Mr. Jeffery Heffelman
Power Generation Station Director
USEPA AIRS ID – 5106100061

Cross-State Air Pollution Rule (CSAPR) Designated Representative

Mr. Edward H. Baine
Vice President Power Generation System Operations

Alternate CSAPR Designated Representative

Mr. Jeffery Heffelman
Power Generation Station Director

Affected Source

Dominion Remington Combustion Turbine Station
12025 Lucky Hill Road
Remington, Virginia 22734

Facility Contact Person

Mr. Scott Lawton
Director, Electric Environmental Business Support
(804) 273-2600

County-Plant Identification Number: 51-061-00061
ORIS Code: 7838

Affected Source Description: NAICS 221112 – SIC 4911 – Electrical Services

Virginia Electric and Power Company constructed and operates four simple-cycle dual fuel combustion turbines (CTs) designated as Unit 1, Unit 2, Unit 3, and Unit 4. Natural gas is the primary fuel with Number 1 and 2 distillate fuel oil as the backup fuel.

The facility was issued a minor New Source Review (NSR) permit to construct and operate on June 25, 1999 for five units, identified as Unit 1, Unit 2, Unit 3, Unit 4, and Unit 5. Unit 5 was never constructed and will require an additional permit to construct and operate since the applicable permit construction period has expired without construction commencing. The June 25, 1999 NSR permit was superseded on April 1, 2008 with a minor NSR amendment which allowed for the installation of an air fogging system on each of the combustion turbines. On May 14, 2013 an administrative amendment to the April 1, 2008 NSR was issued which added a subsection to one of the conditions which described the procedures for retuning the combustion turbines. The May 14, 2013 was amended on July 24, 2014 by adding the facility procedures for fuel type transfers into the appendix to the permit and described the conditions in which excess emissions were allowed during this activity.

This source is located in an attainment area for all pollutants, and is a synthetic minor source under the Prevention of Significant Deterioration (PSD) regulations (9 VAC 5-80 Article 8). For the purposes of an Article 3 Federal Operating Permit program (9 VAC 5-80-360), the source is classified as a major source for NO_x emissions.

The initial Acid Rain Permit was issued on January 1, 2000. In 2005, a rule known as the Clean Air Interstate Rule (CAIR) was applicable to the facility's four (4) electric generating units and remained in place through the 2014 compliance periods. Effective January 1, 2015, a "new" federal rule – the Cross-State Air Pollution Rule took effect and replaced CAIR. The requirements of the Acid Rain Program and CSAPR are incorporated into this federal operating permit.

Additionally, in a letter to the DEQ dated March 2, 2000, the facility applied for a custom fuel monitoring schedule for Unit 1, Unit 2, Unit 3, and Unit 4 by requesting that the Department of Environmental Quality (DEQ) send their request to EPA. DEQ forwarded the facility request to EPA in a letter dated March 22, 2000. EPA approved the custom fuel monitoring schedule for Unit 1, Unit 2, Unit 3, and Unit 4 in a letter dated July 6, 2000. All letters are attached as a part of this permit in Appendix A.

On December 3, 2008 the facility requested to reconfigure the operating software to allow for the operation of Unit 1, Unit 2, Unit 3, and Unit 4 in peak firing mode. An exemption letter was issued on March 3, 2009 allowing this operation.

As part of the development of this Title V permit it was discovered that the operational procedures for the alternative operating scenario were not included in the previous NSR permit. It was determined that an administrative amendment to the April 1, 2008 permit was necessary and an NSR permit amendment was issued on May 14, 2013 to incorporate this operational procedure to the existing alternate operating scenario listed in the permit, which superseded the April 1, 2008 NSR permit.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity ¹ (P)-Primary Fuel (S)-Secondary Fuel	Pollution Control Device (PCD) Description	PCD ID ²	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
Unit 1 Unit 2 Unit 3 Unit 4	CTS1 CTS2 CTS3 CTS4	Each CT is a GE Model PG7241 (FA) simple cycle combustion turbine. Constructed in 2000	1,766 MMBtu/hr on natural gas each ³ (P) (nominal heat input) 1,917 MMBtu/hr on Number 1 and 2 distillate fuel oil each ³ (S) (nominal heat input)	When firing natural gas – dry low NO _x burners, each unit When firing Number 1 and 2 distillate fuel oil – water injection, each unit.	DLN1 DLN2 DLN3 DLN4 WI1-WI4	Nitrogen Oxides (as NO ₂) Nitrogen Oxides (as NO ₂)	7/24/14 Minor NSR permit
PH1 PH2	PHS1 PHS2	Natural gas pipeline heaters. Constructed in 2000.	5.21 MMBtu/hr, each (nominal heat input)	None	N/A	N/A	7/24/14 Minor NSR permit
Miscellaneous Equipment							
Unit 1 Unit 2 Unit 3 Unit 4	N/A	Inlet air fogging systems on each turbine	36 gallons/min each	None	N/A	N/A	7/24/14 Minor NSR permit
TNK 1 TNK 2	N/A	Number 1 and 2 distillate fuel oil tanks. Constructed in 2000.	2,700,000 gallons, each. (nominal storage capacity)	None	N/A	N/A	7/24/14 Minor NSR permit

¹ Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit unless the specifications are needed to form the basis for one or more of the other terms or conditions in the permit.

² DLN = dry low NO_x technology
 WI = water injection

³ When operated at 100% base load at an ambient temperature of 59 °F, 60% relative humidity and a pressure of 14.7 psia. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics.

Fuel Burning Equipment Requirements – Combustion Turbines (CT) and Pipeline Heaters (PH1 and PH2)

Limitations

1. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations

- a. Nitrogen oxides (as NO₂) emissions from each CT while firing pipeline quality natural gas, shall be controlled by the utilization of a dry low NO_x combustor and water injection when firing on Numbers 1 and 2 distillate fuel oil. The CTs shall be provided with adequate access for inspection.
- b. Particulate matter (PM-10) emissions from each CT shall be controlled by the use of pipeline quality natural gas as the primary fuel and Number 1 and 2 distillate fuel oil as the back-up fuel along with good combustion operating practices.
- c. Sulfur dioxide (SO₂) emissions from each CT shall be controlled by the use of pipeline quality natural gas as the primary and low sulfur Number 1 and 2 distillate fuel oil as the secondary fuel with a sulfur content not to exceed 0.05% by weight per shipment (shipment as defined in Appendix B).
- d. Carbon monoxide (CO) and Volatile organic compounds (VOC) emissions from each CT shall be controlled by the use of good combustion operating practices.

(9 VAC 5-80-490B & C and Condition 2 of the July 24, 2014 NSR permit)

2. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – The approved fuels for the CTs are pipeline quality natural gas (as defined in 40 CFR 72.2) as the primary fuel and Numbers 1 and 2 distillate fuel oil, as the back-up fuel.

- a. A change in fuel may require a permit to modify and operate.
- b. Number 1 and 2 distillate fuel oil is defined as fuel oil that meets the specifications for fuel oil Numbers 1 and 2 under the American Society for Testing and Materials, most current version of ASTM D396 "Standard Specification for Fuel Oils" (or other applicable approved ASTM methods, incorporated in 40 CFR 60 by reference). The maximum sulfur content of Numbers 1 and 2 distillate fuel oil shall not exceed 0.05 percent by weight per fuel oil transfer/shipment receipt as defined in Appendix B.
- c. Records of all fuel supplier certifications shall be available for inspection and shall be current for the most recent five years.

(9 VAC 5-80-490B & C and Condition 10 and 11 of the July 24, 2014 NSR permit)

3. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations

- a. The maximum sulfur content of the pipeline quality natural gas shall not exceed 20 grains per 100 dry standard cubic feet.
- b. The annual average sulfur content of the pipeline quality natural gas shall not exceed 0.5 grains per 100 dry standard cubic feet per year, calculated monthly as the average of each consecutive twelve-month period. Compliance with the consecutive twelve-month period shall be demonstrated monthly by averaging the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

(40 CFR 60.333, 9 VAC 5-50-410, 9 VAC 5-80-490B & C, and Condition 12 of the July 24, 2014 NSR permit)

4. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – Short-term emission limits from the operation of each CT while being fired on natural gas shall not exceed the limits specified below (except during start-up and shut-down conditions as defined below, fuel type transfer and re-tuning in accordance with Conditions 10 and 11 of this permit).

- a. Start-up is defined as the period commencing with ignition of the unit and consisting of two (2) hours of continuous emission monitoring system (CEMS) data.
- b. Shut-down is defined, as the period comprised of the final two hours of CEMS data prior to the time when no fuel is being combusted.

PM including condensables	18 lbs/hr	(9 VAC 5-50-260)
PM-10 including condensables	18 lbs/hr	(9 VAC 5-50-260)
Nitrogen Oxides	9 ppmvd @ 15% O ₂ (1-hour average)	(9 VAC 5-50-260)
Carbon Monoxide	9 ppmvd @ 15% O ₂ (3-hour average)	(9 VAC 5-50-260)

(9 VAC 5-50-260, 9 VAC 5-80-490B & C and Condition 19 of the July 24, 2014 NSR permit)

5. Fuel Burning Equipment Requirements – CT (ID# Units 1, Unit 2, Unit 3, and Unit 4) – Limitations – Short-term emission limits from the operation of each CT while fired on Numbers 1 and 2 distillate fuel oil shall not exceed the limits specified below (except during start-up and shut-down conditions as defined in Condition 4 of this permit, fuel type transfer, and re-tuning in accordance with Conditions 10 and 11 of this permit):

PM including condensables	34 lbs/hr	(9 VAC 5-50-260)
PM-10 including condensables	34 lbs/hr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	42 ppmvd @ 15% O ₂ (1-hour average)	(9 VAC 5-50-260)
Carbon Monoxide (CO)	30 ppmvd @ 15% O ₂ (3-hour average)	(9 VAC 5-50-260)

(9 VAC 5-50-260, 9 VAC 5-80-490B & C and Condition 20 of the July 24, 2014 NSR permit)

6. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations** – NO_x emissions (as NO₂) from each CT when firing Number 1 and 2 distillate fuel oil, shall not exceed 42 ppmvd at 15% O₂ on a one hour average basis (as measured by CEMS). If the source wishes to account for the fuel bound nitrogen (FBN) allowance provided in the NSPS Subpart GG, for FBN values between 0.015% up to 0.05% (the maximum FBN allowed), the adjusted standard shall be determined, recorded and maintained upon each new fuel delivery by the following formula:

$$\text{Standard} = (0.04 \times N) + 0.0042$$

where:

Standard = allowable NO_x emissions (percent by volume at 15% O₂ and on a dry basis)
N = the nitrogen content of the fuel oil (percent by weight)

Note: 0.0042 percent = 42 ppm

Modifying the NO_x limit by accounting for the fuel bound nitrogen as in paragraph (a) (1) and (2) of 40 CFR Part 60 Subpart GG is optional. The owner or operator may choose to apply a NO_x allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with paragraph (a) (4) of 40 CFR Part 60 Subpart GG or may accept an F-value of zero.

(9 VAC 5-80-490B & C, 40 CFR 60-Subpart GG, and Condition 23 of the July 24, 2014 NSR permit)

7. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations** – Total annual emissions from the combined operation of Unit 1, Unit 2, Unit 3, and Unit 4 shall not exceed the limits specified below:

a. Nitrogen Oxides (NO _x as NO ₂)	244.0 tons/yr ¹
b. Sulfur Dioxide (SO ₂)	76.3 tons/yr ²
c. Carbon Monoxide (CO)	118.9 tons/yr ²
d. Particulate Matter (PM-10)	73.8 tons/yr ²
e. Volatile Organic Compounds (VOC)	11.5 tons/yr ²

NOTE: ¹NO_x emission rate calculations for the CTs shall be calculated daily as the sum of each consecutive 365-day period. Compliance determination with the annual NO_x limit shall be determined using the NO_x mass emission provisions of 40 CFR Part 75, Subpart H, with the exception of data substitution as described in Condition 22 of this permit.

²SO₂, CO, PM/PM-10 and VOCs shall be calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

(9 VAC 5-50-260, 9 VAC 5-80-490B & C and Condition 21 of the July 24, 2014 NSR permit)

8. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations** – Visible emissions from each CT stack shall not exceed ten percent opacity except during one six-minute period in any one hour period in which visible emissions shall not exceed twenty percent opacity as determined by the EPA Reference Method 9 (40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, malfunction, fuel type transfers, and re-tuning.
(9 VAC 5-80-490B & C and Condition 24 of the July 24, 2014 NSR permit)

9. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations** – Excess emissions resulting from malfunctions shall be permitted provided that:

- a. Best operational practices are adhered to and the duration of excess emissions shall be minimized;
- b. During each malfunction, NO_x emission concentrations based on hourly averages (4-hour rolling averages) shall not exceed the NO_x standards of the New Source Performance Standards (NSPS) 40 CFR 60.332 of Subpart GG;
- c. The permittee shall notify the Regional Air Compliance Manager of the DEQs NRO within four daytime business hours after a malfunction is discovered. The notification shall include, but is not limited to the following information;
 - i. Identification of the specific CT experiencing the malfunction;
 - ii. The nature and quantity of emissions of air pollutants likely to have occurred during the malfunction;
 - iii. Measures that will be taken to minimize the length of the malfunction;
- d. The permittee shall include the excess emissions in the quarterly report and shall include, but is not limited to, the following information;
 - i. Identification of the CT that experienced the malfunction;
 - ii. The magnitude of excess emissions per CT, any conversion factors used in the calculation of the excess emissions, and the date and time of commencement and completion of each period of excess emissions;
- e. NO_x emissions during each malfunction shall be recorded and included in the total annual emissions;
- f. The excess emissions resulting from a malfunction for each CT shall be identified in the quarterly excess emissions report.

(9 VAC 5-20-180J, 9 VAC 5-50-20E, 9 VAC 5-50-410, 9 VAC 5-80-490F, and Condition 18 of the July 24, 2014 NSR permit)

10. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – Fuel type transfers** – The fuel type transfer shall be conducted in accordance with those procedures outlined in Appendix C of this permit and is limited to the following:

- a. Event 1 – Automatic or Operator Initiated Fuel Type Transfer from Pipeline Quality Natural Gas to Numbers 1 and 2 Distillate Fuel Oil: The period will begin when pipeline quality natural gas usage is first reduced for the purpose of transferring to Numbers 1 and 2 distillate fuel oil and will end when Numbers 1 and 2 distillate fuel oil consumption and water injection have stabilized.
- b. Event 2 – Operator Initiated Fuel Type Transfer from Numbers 1 and 2 Distillate Fuel Oil to Pipeline Quality Natural Gas: The period will begin when the turbine’s work load is reduced for the purpose of transferring to pipeline quality natural gas and will end when Numbers 1 and 2 distillate fuel oil usage ceases and the turbine is re-stabilized in Mode 6 for dry low NO_x burners.
- c. Excess NO_x Emissions: Excess NO_x emissions from each combustion turbine shall be limited to no more than three one-hour averaging periods for any fuel type transfer event, unless specifically authorized by DEQ for longer duration prior to the event. For each fuel type transfer event, the permittee shall:
 - i. Operate all equipment in a manner consistent with good air pollution control practices for minimizing emissions.
 - ii. Should the alternate operating scenario require updating, such update shall be submitted to the Regional Air Compliance Manager of DEQs NRO within thirty days of implementation.
 - iii. Excess emissions during the fuel type transfer procedure will be recorded and included in the quarterly Excess Emission Report as required in Condition 38. The continuous emission monitoring (CEM) data will be “flagged” to indicate that fuel type transfer took place.
- d. Other Excess Emissions – Other excess emissions resulting from the fuel type transfer for each combustion turbine shall be permitted provided that the procedures specified in Appendix C of this permit are followed.

(9 VAC 5-20-180J, 9 VAC 5-50-20E, 9 VAC 5-80-490F, and Condition 17 of the July 24, 2014 NSR permit)

11. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – Re-tuning** – Re-tuning of the CTs shall be conducted in accordance with those procedures outlined in Appendix D of this permit. Excess emissions resulting from the re-tuning of the CTs shall be permitted provided that:
 - a. Best operational practices are adhered to and the duration of excess emissions shall be minimized, but in no case shall exceed twelve hours per combustion turbine (CT) re-tuning event in any twenty-four hour period. The operator may request additional hours from the DEQ.
 - b. During each CTs re-tuning event, NO_x emission concentrations, based on an hourly average, shall not exceed the NO_x standards of the New Source Performance

Standards (NSPS) 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines (60.330 et seq.).

- c. The permittee shall notify the Regional Air Compliance Manager of the DEQs NRO (at the address referenced in Condition 35), no less than twenty-four hours prior to each CTs re-tuning event. The notification shall include, but is not limited to, the following information:
 - i. Identification of the specific CT to be re-tuned.
 - ii. Reason for the re-tuning event.
 - iii. Measures that will be taken to minimize the length of the re-tuning event.

(9 VAC 5-50-50E, 9 VAC 5-80-490F, and Condition 16 of the July 24, 2014 NSR permit)

12. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – The Number 1 and 2 distillate fuel oil's sulfur content continuing compliance shall be verified as follows:

- a. Prior to combustion, the permittee shall test the Number 1 and 2 distillate fuel oil for sulfur (and nitrogen content if the source chooses to account for the FBN allowance provided in NSPS Subpart GG), on each occasion that fuel is transferred (as referenced in Appendix B of this permit) to the storage tank, from any other source.
- b. Fuel oil sulfur content shall be determined using the most current version of ASTM D 2880 or another approved ASTM method incorporated in 40 CFR 60 by reference.
- c. Fuel oil nitrogen content shall be determined by following the current ASTM procedures approved by the Administrator of the EPA. Any deviations to test methods used by the permittee to determine sulfur and nitrogen content shall be submitted to the Regional Air Compliance Manager for the DEQs NRO for approval.
- d. Records of the fuel oil sulfur and nitrogen content shall be available on-site for inspection by DEQ personnel. They shall be kept on file for the most current five year period.

(9 VAC 5-80-490E, 40 CFR 60.40 CFR 60.4360, 40 CFR 60.4365, and Condition 14 of the July 24, 2014 NSR permit)

13. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Limitations – The natural gas sulfur content continuing compliance shall be verified as follows by the permittee's custom fuel monitoring schedule which received approval from the Environmental Protection Agency (EPA) in accordance with 40 CFR Part 60, Subpart GG. The permittee's custom fuel schedule is as follows:

- a. The permittee will follow all applicable sulfur content determinations and monitoring requirements for pipeline natural gas in 40 CFR Part 75, Appendix D.
- b. The permittee recognizes that Subpart GG establishes the following sulfur dioxide (SO₂) emissions limitations:

- i. No owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine any gasses containing SO₂ in excess of 0.015% by volume at 15% oxygen and on a dry basis; or,
 - ii. No owner or operator shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8% by weight.
- c. If there is a change in fuel supply the permittee must notify the Regional Air Compliance Manger of the DEQs NRO (at the address referenced in Condition 33) of such change for re-examination of this custom fuel monitoring 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 fuel monitoring schedule is being re-examined.
- d. As per 40 CFR 60.334(h)(3) and notwithstanding 40 CFR 60.334(h)(1), the owners or operators may elect not to monitor more frequently than once per year (40 CFR 75, Appendix D, Section 2.3.1.4 or 2.3.2.4) for the total sulfur content of the gaseous fuel combusted in a turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 60.331(u), regardless of whether an existing custom fuel monitoring schedule approved by the administrator for Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- i. The gas quality characteristics in a current valid purchase contract, tariff sheet, or transportation contract for gaseous fuel specifying that the maximum total sulfur content of the fuel is 20 grains/100 scf or less; or
 - ii. Representative fuel sampling data which shows that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR 75 shall be acquired.
- e. Records of the sample analysis and fuel supply pertinent to the custom fuel monitoring schedule shall be available on-site for inspection by the DEQ and kept on file for the most current five-year period.
- f. The permittee shall comply with EPAs custom fuel monitoring schedule approval letter dated July 6, 2000 listed as Appendix A to this permit.

(9 VAC 5-80-490E, Condition 13 of the July 24, 2014 NSR permit and EPA's July 6, 2000 letter)

14. Fuel Burning Equipment Requirements – PH (ID# PH1 and PH2) – Limitations –

Emissions from the pipeline heaters shall be controlled by the following:

- a. Particulate matter (PM-10) emissions from each pipeline heater shall be controlled by the use of clean fuel and good combustion practices.
- b. Sulfur dioxide (SO₂) emissions from each pipeline heater shall be controlled by the use of low sulfur fuel.

- c. Carbon monoxide (CO) and Volatile organic compounds (VOC) emissions from each pipeline heater shall be controlled by the use of good combustion practices.

(9 VAC 5-80-490 B & C and Condition 3 of the July 24, 2014 NSR permit)

- 15. **Fuel Burning Equipment Requirements – PH (ID# PH1 and PH2) – Limitations** – The approved fuel for each pipeline heater is pipeline quality natural gas (as defined in 40 CFR 72.2). A change in fuel may require a permit to modify and operate.

(9 VAC 5-80-490B & C and Condition 10 of the July 24, 2014 NSR permit)

- 16. **Fuel Burning Equipment Requirements – PH (ID# PH1 and PH2) – Limitations**

- a. The maximum sulfur content of the pipeline quality natural gas shall not exceed 20 grains per 100 dry standard cubic feet.
- b. The annual average sulfur content of the pipeline quality natural gas shall not exceed 0.5 grains per 100 dry standard cubic feet per year, calculated monthly as the average of each consecutive twelve-month period. Compliance with the consecutive twelve-month period shall be demonstrated monthly by averaging the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

(40 CFR 60.333, 9 VAC 5-50-410, 9 VAC 5-80-490B & C, and Condition 12 of the July 24, 2014 NSR permit)

Monitoring

- 17. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring**

- a. The permittee shall perform a visible emission observation (VEO) during daylight hours, on each CT exhaust stack once each day that the CTs are operated.
 - i. The VEO shall be based on the techniques of an EPA Method 22 with a follow-up EPA Reference Method 9, should an observation indicate visible emissions for more than six consecutive minutes.
 - ii. Each VEO shall be performed for a sufficient period of time to identify the presence or absence of visible emissions.
 - iii. If no visible emissions are observed, no action shall be required.
- b. If visible emissions are observed, a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for a period of not less than 6-minutes.
 - i. If the average opacity exceeds 20%, corrective action and/or repairs to the CT shall be performed to correct the problem and the corrective measures shall be recorded.

- ii. If such corrective action fails to remedy the opacity problem, a VEE in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be performed for a period of at least 18 consecutive minutes to determine compliance with the opacity limits specified in this permit.
- c. The follow-up VEE, if required, shall be conducted by currently certified visible emission evaluator.

(9 VAC 5-80-490E)

18. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring – A continuous emission monitoring system (CEMS) shall be installed, monitored, maintained and operated to measure and record the emissions of nitrogen oxides from each CTs exhaust stack.

- a. A diluent monitor (O_2 or CO_2) shall be co-located with each nitrogen oxide concentration monitor.
- b. The CEMS shall be installed, maintained, calibrated and operated in accordance with the performance specifications and test procedures (as applicable) identified in 40 CFR 75, Appendices A and B.
- c. A thirty day notification, prior to the demonstration of the any CEMS performance test or annual relative accuracy test (RATA) shall be submitted to the Regional Air Compliance Manager of the DEQs NRO at the address listed in Condition 33.
- d. Two copies of the performance test evaluation reports and CEM RATA reports (one hard copy and one on electronic media) shall be submitted to Regional Air Compliance Manager of the DEQs NRO.
- e. The quality assurance of data generated by the CEMS shall be demonstrated by implementing or exceeding the minimum requirements for CEMS quality assurance as defined in 40 CFR 75, Appendix B.
- f. A NO_x CEMS quality control program which meets the requirements of 40 CFR 75 and 40 CFR 75, Appendix B, shall be implemented for all continuous monitoring systems.
- g. As per 40 CFR 75, Appendix B, no more than four successive calendar quarters plus the allowable grace period allowed in 40 CFR 75 will elapse without performing a NO_x and O_2 or CO_2 analyzer linearity check.
- h. As per 40 CFR 75, Appendix B, no more than eight successive calendar quarters plus the allowable grace period allowed in 40 CFR 75 shall elapse without performing a NO_x CEMS RATA.

(9 VAC 5-80-490E, 40 CFR 60.334(b), and Condition 4 of the July 24, 2014 NSR permit)

19. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring** – Should the NO_x/O₂ or CO₂ CEMS fail and require replacement, the requirements of Condition 18 of this permit shall be followed.
(9 VAC 5-80-490E and 40 CFR 60.334)
20. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring** – At the discretion and approval of the Board, the NO_x CEMS required by this permit, the continuous monitoring data, and the quality assurance data shall be used to determine compliance with the NO_x emission limits and/or relevant emission standards. Each monitor is subject to such data capture requirements and/or quality assurance requirements as specified in this permit and as may be deemed appropriate by the Board.
(9 VAC 5-80-490E and Condition 5 of the July 24, 2014 NSR permit)
21. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring** – The NO_x CEMS required by this permit shall meet a minimum data capture of 90% of each CTs respective operating hours, calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.
(9 VAC 5-80-490E and Condition 6 of the July 24, 2014 NSR permit)
22. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Monitoring** – In the event of a NO_x CEMS failure, the permittee must either:
- a. Use the maximum allowable hourly NO_x emission rate (in ppm), for each hour of operation where CEMS data is not available. This data shall be included in the rolling 365-day emission summation; or
 - b. Provide data which demonstrates an accurate correlation between the water-to-fuel injection curve and actual emission rates. Upon approval of the DEQ, this curve can be used as surrogate CEM data for future emission calculations.
- (9 VAC 5-80-490E and Condition 7 of the July 24, 2014 NSR permit)

Recordkeeping

23. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Recordkeeping** – The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the oil was received;
 - c. The volume of distillate oil delivered in the shipment;

- d. A statement that the oil complies with the American Society for Testing and Materials specification for fuel oil numbers 1 and 2; and
- e. The sulfur content of the oil.

(9 VAC 5-80-490, Appendix B of this permit and Condition 10 of the July 24, 2014 NSR permit)

24. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Recordkeeping – The permittee shall maintain records of emission data and operating parameters, as necessary, to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQs NRO. These records shall include, but not limited to the following:

- a. All fuel certification records;
- b. The hourly fuel consumption (in scf/hr of pipeline natural gas and gallons/hr of Number 1 and 2 fuel oil) of each CT (Unit 1, Unit 2, Unit 3, and Unit 4);
- c. The times of operation of each CT when firing with Number 1 and 2 distillate fuel oil;
- d. Hourly throughput of Number 1 and 2 distillate fuel oil and natural gas to each CT, for purposes of calculating hourly emissions for pollutants for which there is not a continuous emissions monitor;
- e. Annual throughput of distillate fuel oil and natural gas for each CT, calculated monthly as the total for the most recent twelve complete calendar months;
- f. Monthly emissions calculations for PM-10, sulfur dioxide, carbon monoxide, and VOC from the CTs stacks using calculation methods approved by the Regional Air Compliance Manager of DEQs NRO. These calculation methods may use the hourly operation information above and the most recent stack test information or AP-42, as determined to be appropriate by the Regional Air Compliance Manager of the DEQs NRO;
- g. All valid purchase contracts, tariff sheets or transportation contracts for the fuels, specifying that the maximum sulfur content of the natural gas as required in Condition 13;
- h. The permittee shall have available good written operating procedures and a maintenance schedule for the CTs. These procedures shall be based on the manufacturer's recommendations, at minimum as required in Condition 34;
- i. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown, or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record:

- j. The permittee shall maintain records of each occurrence of control equipment scheduled maintenance in which the control equipment will be shut down or bypassed or both which will result in excess emissions for more than one hour. The records shall include, but not limited to the following:
 - i. Identification of the air pollution control equipment to be taken out of service using the PCD ID number from condition II, as well as its location, and registration number of the facility;
 - ii. The expected length of time that the air pollution control equipment will be out of service;
 - iii. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
 - iv. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage;
 - v. All records of excess emissions to include date, time, cause, and corrective action taken to alleviate the excess emissions as required in Condition 55;
 - vi. All records of scheduled and unscheduled maintenance;
 - vii. All records of VEOs shall recorded and shall contain the date, time, results of the VEO, description of any modifications and/or repairs, if necessary to correct any problem, and all follow-up VEE records including name of certified observer, date, time, results of follow-up VEE and operating parameters necessary to demonstrated compliance with this permit. The content of and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQs NRO.

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 5-80-490F and Conditions 10 and 25 of the July 24, 2014 NSR permit)

25. **Fuel Burning Equipment Requirements – (CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Recordkeeping** – The permittee shall maintain records of the required training including a statement of time, place, and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the CTs. These procedures shall be based on the manufacturer's recommendations, at a minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.

(9 VAC 5-80-490 and Condition 31 of the July 24, 2014 NSR permit)

Testing

26. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Testing** – The permit does not require source tests. The DEQ and EPA have the authority to require testing necessary to determine compliance with an emission limit or standard at any reasonable time.

(9 VAC 5-80-490E & F)

27. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Testing** – The generating facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-490E and Condition 26 of the July 24, 2014 NSR permit)
28. **Fuel Burning Equipment Requirements – (CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Testing** – If testing is conducted in addition to the monitoring specified in this permit, and the results are to be acceptable by DEQ, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490)

Reporting

29. **Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Reporting – Excess Emissions** – The permittee shall furnish written reports to the Regional Air Compliance Manager of the DEQs NRO (at the address referenced in Condition 35), of excess emissions from any process monitored by a CEMS, on a quarterly basis, postmarked no later than the thirtieth day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
- a. For each month in the quarter, report each hour in which a NO_x permit limit is exceeded. The report shall include for each excess emission of NO_x:
 - i. Start time;
 - ii. Duration;
 - iii. Equipment involved;
 - iv. Actual NOX emissions in ppmvd @ 15% O₂;
 - v. Fuel type and consumption rate;
 - vi. Nitrogen content of fuel oil if applicable;
 - vii. Actual weather conditions (temperature and barometric pressure) and;
 - viii. CT load.
 - b. If during the calendar quarter 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 5-50-50, 9 VAC 5-80-490, and Condition 8 of the July 24, 2014 NSR Permit)

30. Fuel Burning Equipment Requirements – CT (ID# Unit 1, Unit 2, Unit 3, and Unit 4) – Reporting – Re-tuning Event

- a. The permittee shall furnish a written report to the Regional Air Compliance Manager of the DEQs NRO of all pertinent facts concerning the re-tuning event, as soon as practicable but not later than fourteen business days after the re-tuning event. The notification shall include, but is not limited to, the following information.
 - i. Identification of the CT that was re-tuned.
 - ii. The magnitude of excess emissions for each CT, any conversion factors used in the calculation of the excess emissions, and the date and time of commencement and completion of each period of excess emissions.
- b. NO_x emissions during each CTs re-tuning event shall be recorded and included in the associated quarterly reports and in the total annual emissions.
- c. The excess emissions resulting from the re-tuning event for each CT shall be identified in the quarterly excess emission report.

(9 VAC 5-50-50E, 9 VAC 5-80-490F, and Condition 16 of the July 24, 2014 NSR permit)

Facility Wide Conditions

Limitations

31. Facility Wide – Limitations – Total annual emissions from the combined operation of all the emission sources at the facility shall not exceed the limits specified below:

- | | |
|--|---------------|
| a. Sulfur Dioxide (SO ₂) | 80.9 tons/yr |
| b. Nitrogen Oxides (NO _x as NO ₂) | 249.0 tons/yr |
| c. Carbon Monoxide (CO) | 122.7 tons/yr |
| d. Particulate Matter (PM-10) | 74.2 tons/yr |
| e. Volatile Organic Compounds (VOC) | 11.8 tons/yr |

The total facility wide annual emissions shall be calculated monthly as the sum of each consecutive twelve-month period. Compliance for the consecutive twelve-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

(9 VAC 5-50-260, 9 VAC 5-80-490B & C and Condition 22 of the July 24, 2014 NSR permit)

32. Facility Wide Conditions – Limitations – At all times, including periods of start-up, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

- a. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
 - i. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - ii. Maintain an inventory of spare parts.
 - iii. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - iv. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment.
 - v. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- b. Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-490 and Condition 31 of the July 24, 2014 NSR permit)

Reporting

33. Facility Wide Conditions – Reporting

- a. All DEQ correspondence concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

- b. Unless otherwise specified in Condition 52, all EPA correspondence concerning this permit should be submitted to the following address:

U.S. Environmental Protection Agency, Region III
Air Protection Division (3AP12)
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-490 and Condition 4 July 24, 2014 NSR Permit)

34. **Facility Wide Conditions – Reporting** – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQs NRO of malfunctions of the affected facility

or related air pollution control equipment that may cause excess emissions for more than one hour, by email, facsimile transmission, telephone or telegraph.

- a. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered.
- b. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction.
- c. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Regional Air Compliance Manager of the DEQs NRO.

(9 VAC 5-80-490 and Condition 27 of the July 24, 2014 NSR permit)

35. **Facility Wide Conditions – Reporting – Control Equipment Maintenance** – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQs NRO of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which may result in excess emissions for more than one hour, at least twenty-four hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service using the PCD ID number from Condition II, as well as its location, and registration number of the facility;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-490F and Condition 28 of the July 24, 2014 NSR permit)

36. **Facility Wide Conditions – Reporting – Fuel Type Transfer** – Any excess emissions associated with the fuel type transfer shall be included in the quarterly Excess Emission Report with the CEM data “flagged” to indicate that fuel type transfer was taking place.
(9 VAC 5-50-50E, 9 VAC 5-80-490F, and Condition 17 of the July 24, 2014 NSR permit)

Insignificant Emission Units

37. **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 9 VAC 5-80-720B	Pollutant(s) Emitted (if applicable to 9 VAC 5-80-720B)	Rated Capacity (if applicable to 9 VAC 5-80-720)
TNK1	Number 1 and 2 distillate fuel oil storage tank	9 VAC 5-80-720B	VOC	2,700,000 gallons
TNK2	Number 1 and 2 distillate fuel oil storage tank	9 VAC 5-80-720B	VOC	2,700,000 gallons
PH-1	Pipeline heater	9 VAC 5-80-720B	PM, PM-10, SO ₂ , NO _x , and VOC	5.21 MMBtu/hr
PH-2	Pipeline heater	9 VAC 5-80-720B	PM, PM-10, SO ₂ , NO _x , and VOC	5.21 MMBtu/hr

These emission units are presumed to be in compliance with all requirements of the 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 5-80-490 (9 VAC 5-80-720 and -80-490C, E, and F)

Permit Shield & Inapplicable Requirements

38. **Permit Shield & Inapplicable Requirements** – Compliance with the provisions of this permit shall be deemed in 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
40 CFR 61	NESHAP	Source Category not listed
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input 100 MMBtu/hr or less, but greater than or equal 10 MMBtu/hr. Since PH-1 and PH-2 are only 5.21 MMBtu/hr this does not apply.
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)	The storage vessels store liquids with a vapor pressure less than 3.5 kilopascals (0.5 psia).

40 CFR 63, Subpart YYYY	Standards of Performance for Combustion Turbines	The facility is not a major source of HAPs
9 VAC 5 Chapter 80, Article 7 and 9 VAC 5 Chapter 60, Article 3	Major HAPS Minor NSR permitting	Not a major HAPS source.
4 CFR 64	Compliance Assurance Monitoring (CAM)	Condition 4 of the 5/14/2013 NSR Permit requires CEMS to demonstrate compliance with permitted NO _x emission limits for the CT units. Therefore, these units are not subject to CAM per 40 CFR 64.2(b)(1)(vi).
40 CFR 68	Prevention of Accidental Chemical Releases	Any chemicals on-site are below threshold levels.

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 5-80-500)

General Conditions

- 39. **General Conditions – 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 5-80-490N)
- 40. **General Conditions – Permit Expiration** – The Title V permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of the permit. Unless the owner submits a timely and complete renewal application to Departmental of Environmental Quality (DEQ) consistent with 9 VAC 5-80-430, the right of the facility to operate shall terminate upon permit expiration.
 (9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)
- 41. **General Conditions – Permit Expiration** – The permit can be set to expire for a period of less than five years if required to bring the enforcement period into concurrence with other permitting programs. This Article 3 Title V/Title IV (Acid Rain) permit is a combined permit and therefore shall be issued to meet the enforcement period of the combined permitting programs.
 (9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)
- 42. **General Conditions – Permit Expiration – General Conditions – Permit Expiration** – 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.
 (9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)

43. **General Conditions – Permit Expiration** – 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 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.

(9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)

44. **General Conditions – Permit Expiration** – 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 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.

(9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)

45. **General Conditions – Permit Expiration** – If an applicant submits a timely and complete application under 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;

a. The previous permit shall not expire until the renewal permit has been issued or denied and;

b. All the terms and conditions of the previous permit, including any permit shield granted pursuant to 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.

(9 VAC 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)

46. **General Conditions – Permit Expiration** – The protection under subsections F1 and F5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 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 5-80-430B, C, and F, 9 VAC 5-80-490D, and 9 VAC 5-80-530B)

47. **General Conditions – Recordkeeping and Reports** – 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 date(s) 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 5-80-490F)

48. **General Conditions – Recordkeeping and Reporting** – 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 5-80-490F)

49. **General Conditions – Recordkeeping and Reporting** – The permittee shall submit the results of monitoring contained in any applicable requirement to the Regional Air Compliance Manager of the DEQs NRO 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 5-80-430G and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 inclusive and July 1 to December 31 inclusive.
- b. All deviations from permit requirements. For purposes of this permit, a deviation includes, but is not limited to the following:
 - i. Exceedance of emissions limitations or operational restrictions,
 - ii. 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,
 - iii. 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 5-80-490F)

50. **General Conditions – 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 9 VAC 5-80-430G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.

- c. The identification of each term or condition of the permit that is the basis of the certification.
- d. The compliance status.
- e. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- f. Consistent with subsection 9 VAC 5-80-490E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- g. Such other facts as the permit may require in determining the compliance status of the source.
- h. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-490K.5)

51. **General Conditions – Permit Deviation Reporting** – The permittee shall notify the Regional Air Compliance Manager of the DEQs NRO by email, facsimile transmission, telephone, or telegraph, as soon as practicable but no later than 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 5-40-50C and 9 VAC 5-50-50C 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 49 of this permit.

(9 VAC 5-80-490F.2)

52. **General Conditions – 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 discovery, notify the Regional Air Compliance Manager of the DEQs NRO by email, facsimile transmission, telephone, or telegraph of such failure or malfunction and shall within 14-days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50C and 9 VAC 5-50-50C 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 Regional Air Compliance Manager of the DEQs NRO.
(9 VAC 5-20-180C)

53. **General Conditions – Failure/Malfunction Reporting** – The emission units that have continuous monitors subject to 9 VAC 5-40-50C and 9 VAC 5-50-50C are not subject to the two week written notification.
(9 VAC 5-20-180C and 9 VAC 5-50-50)
54. **General Conditions – Failure/Malfunction Reporting** – The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50C and the procedures of 9 VAC 5-50-50C are:
- a. Unit 1 (NO_x CEMS measurements)
 - b. Unit 2 (NO_x CEMS measurements)
 - c. Unit 3 (NO_x CEMS measurements)
 - d. Unit 4 (NO_x CEMS measurements)
- (9 VAC 5-20-180C and 9 VAC 5-50-50)
55. **General Conditions – Failure/Malfunction Reporting** – Each owner required to install a continuous monitoring system (CMS) 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) to the board for every calendar quarter. All quarterly reports shall be postmarked by the thirtieth day following the end of each calendar quarter and shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41B.6, 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)
56. **General Conditions – 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 5-80-490G.1)

57. **General Conditions – 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 re-issuance, or modification; or for denial of a permit renewal application.
(9 VAC 5-80-490G.2)
58. **General Conditions – 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 5-80-490G.3)
59. **General Conditions – 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 5-80-1790, 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.
(9 VAC 5-80-490G and L, 9 VAC 5-80-550 and 9 VAC 5-80-660)
60. **General Conditions – Property Rights** – The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490G.5)
61. **General Conditions – Duty to Submit Information** – 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 5-80-490G.6)
62. **General Conditions – Duty to Submit Information** – 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 5-80-430G.9.
(9 VAC 5-80-490K.1)
63. **General Conditions – Duty to Pay Fees** – The owner of any source for which a permit under 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, in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. 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 DEQ. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-490H)

64. **General Conditions – 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:
- a. 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;
 - b. 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;
 - c. 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;
 - d. 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
 - e. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

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

65. **General Conditions – Startup, Shutdown, and Malfunction** – At all times, including periods of startup, shutdown, 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 of whether 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 5-40-20E and 9 VAC 5-50-20E)

66. **General Conditions – 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:
- a. 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.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable time's substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
(9 VAC 5-80-490K.2)

67. General Conditions – 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 no later than eighteen 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 5-80-430F.

- a. 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.
- b. 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.
- c. 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 5-80-490D.

(9 VAC 5-80-490L)

68. General Conditions – 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 5-80-510G)

69. General Conditions – Transfer of Permits

- a. No person shall transfer a permit from one location to another or from one piece of equipment to another.
- b. General Conditions – 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 thirty days of the transfer and shall comply with the requirements of 9 VAC 5-80-560.
- c. 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 thirty days of the name change and shall comply with the requirements of 9 VAC 5-80-560.

(9 VAC 5-80-520)

70. General Conditions – Malfunction as Affirmative Defense

- a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition b of this condition are met.
- b. 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:
 - i. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - ii. The permitted facility was at the time being properly operated.
 - iii. 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.
 - iv. 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 5-80-490F.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.
- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
- d. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-650)

- 71. General Conditions – Permit Revocation of 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 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 5-80-490G & L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

72. **General Conditions – 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 5-80-430E)
73. **General Conditions – 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)
74. **General Conditions – Asbestos Requirements** – The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-490A)
75. **General Conditions – 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)
76. **General Conditions – 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 5-80-490I)
77. **General Conditions – 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:
- a. All terms and conditions required under 9 VAC 5-80-490 except subsection N shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-360 through 9 VAC 5-80-700.
- (9 VAC 5-80-490I)

Title IV (Phase II Acid Rain) Permit Allowances and Requirements

78. **Title IV (Phase II Acid Rain) Conditions – Phase II Acid Rain Permit** – The attached Phase II permit (Appendix E) 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 5-80-490A.4.a and c, B, C, E, F, M, O and P)

Cross-State Air Pollution Rule (CSAPR)

79. **CSAPR Conditions – Cross-State Air Pollution Rule (CSAPR)** – The permittee shall comply with all applicable Cross-State Air Pollution Rule (CSAPR) requirements (40 CFR Part 97, Subparts AAAAA-DDDDD) by the compliance date specified in 40 CFR 97, Subparts AAAAA-DDDDD, as amended)

(40 CFR Part 97, Subparts AAAAA-DDDDD and 9 VAC 5-80-110)

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-1

APPENDIX A – CUSTOM FUEL MONITORING SCHEDULE REQUEST AND THE EPA
LETTER OF APPROVAL

RECEIVED

MAR 8 2000

FSO

Innsbrook Technical
5000 Dominion Boulevard
Glen Allen, Virginia



VIRGINIA POWER

March 2, 2000

Mr. Terry Darton
Department of Environmental Quality
Fredericksburg Office
806 Westwood Office Park
Fredericksburg, Virginia 22401

Re: Remington Custom Monitoring Request (Registration No. 40961)

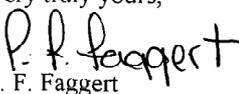
Dear Mr. Darton:

Pursuant to Conditions 22 and 23 of the June 25, 1999 permit (Attachment A) for the Remington Combustion Turbine Station, Virginia Power is requesting the Virginia Department of Environmental Quality seek:

1. EPA final approval of the custom fuel sampling schedule contained in subsections a. through e. of Condition 22 of the above-referenced permit. The schedule was developed based upon custom gas monitoring plans approved for Virginia Power's Chesterfield, Darbytown, and Gravel Neck facilities. The Remington facility will be served by the Transcontinental Gas Pipeline which also received approval of a custom fuel monitoring plan on April 24, 1995 (Attachment B). As noted in the Transcontinental Gas Pipeline (TRANSCO) submittal to EPA dated August 9, 1995 (Attachment C), the highest sulfur level measured in the pipeline was 24.7 ppm from the Mobile Bay area and that is far less than 1% of the allowable NSPS limit of 8,000 ppm. We have also included quarterly data for the TRANSCO pipeline from 1996 through 1999 for the six locations currently being sampled (Attachment D). While the data does show some variability between the different stations sampled, particularly Station 82 from the Mobile Bay area, the data for each station has remained consistent throughout these years.
2. A waiver by the EPA of the fuel monitoring requirement for the nitrogen content of the natural gas as delineated in Condition 23. As outlined in the EPA internal guidance memorandum dated August 14, 1987, there is no fuel-bound nitrogen and the free nitrogen does not contribute appreciably to NOx emissions.

If you have any questions concerning the above, please contact me at 273-3467 or Laura Rose at 273-3016.

Very truly yours,


P. F. Faggert

Vice President and Chief Environmental Officer

Attachments

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-3



FSO-121-00

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

Fredericksburg Office
806 Westwood Office Park
Fredericksburg, Virginia 22401
(540) 899-4600
Fax (540) 899-4647

Dennis H. Treacy
Director

Gregory L. Clayton
Regional Director

March 22, 2000

United States Environmental Protection Agency
Region 3
Attention: Ms. Kathleen Henry
Mail Code 3AP11
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Ms. Henry:

I am forwarding for your review and approval, Virginia Power's proposed custom fuel sampling schedule for their Fauquier County combustion turbine facility, which is based upon prior EPA approved custom gas monitoring plans. In addition Virginia Power is seeking a waiver of the fuel monitoring requirement for natural gas (Subpart GG), concerning fuel bound nitrogen.

If you have any questions concerning this matter or any subject pertaining to air pollution please contact me at the Fredericksburg Office at (540) 899-4534.

Sincerely,

A handwritten signature in cursive script that reads "K. Dean Gossett".

K. Dean Gossett
Senior Environmental Engineer

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

In Reply Refer To: 3AP12

JUL 06 2000

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

RECEIVED

JUL 10 2000

FSO

Ms. Pamela Faggert
Vice President and Chief Environmental Officer
Virginia Power
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Re: Request for Custom Fuel Monitoring Schedule under Subpart GG of NSPS

Dear Ms. Faggert: *Pam*

The Philadelphia Regional Office of the U.S. Environmental Protection Agency (EPA) Region III has received and reviewed your submittal to the Virginia Department of Environmental Quality (VADEQ) requesting approval of a custom fuel monitoring schedule for your stationary gas turbines at the Remington Combustion Turbine Station in Remington, Virginia (Fauquier County) under Subpart GG of the New Source Performance Standards Program. As the turbines combust pipeline-quality natural gas fuel, custom fuel monitoring schedules can be approved by the Administrator under Section 60.334(b)(2) based on the design/operation of the affected facility and the characteristics of the fuel supply. Transcontinental Gas Pipeline Corporation has submitted data on the fuel quality of the natural gas fuel being supplied to the Remington Station, as EPA understands, and this information shows consistent compliance with the NSPS requirement. Region III, therefore, grants Virginia Power a custom fuel monitoring schedule for the Remington Station consistent with EPA's national guidance on the topic contained in a Policy memo dated August 14, 1987 as follows:

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
2. Sulfur Monitoring
 - a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR Section 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.

d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the EPA Regional Office Air Division of such excess emissions and the custom schedule shall be re-examined by the EPA. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the EPA of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years or consistent with applicable State permits, and be available for inspection by personnel of federal, state and local air pollution control agencies.

The above requirements should be consistent with those found in the current VaDEQ air permit for the Remington Station.

If you should have any comments or questions in regard to this matter, do not hesitate to contact me, at (215) 814-3438 or James W. Hagedorn, of my staff, at (215) 814-2161.

Sincerely,



Judith M. Katz, Director
Air Protection Division

cc: K. Dean Gossett
VADEQ-Fredericksburg Regional Office

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-6

APPENDIX B – FUEL TRANSFERS/SHIPMENT RECEIPT DEFINED

Number 1 and 2 Distillate Fuel Oil Transfers

VEPCO – Remington CT station defines fuel oil transfer/shipment as a series of truck transport loads from a vendor's fuel oil tank to the facility's 2,700,000 gal tanks. Prior to the fuel transfer, the vendor shall supply VEPCO personnel with copies of fuel contracts, tariff sheets and/or bills of lading with a maximum total sulfur specification that meets the definition of Number 1 and 2 distillate fuel oil. These certifications will provide, at a minimum, the information needed to meet the requirements in Condition 10 of the July 24, 2014 NSR permit. Copies of the fuel supplier certifications shall be retained at the CT site.

Upon receipt of delivered oil, the receiving tank(s) at the CT site will be sampled for sulfur content prior to combustion. The sampling will be done as referenced in Condition 14 of the July 24, 2014 NSR permit. Copies of these analyses will also be retained at the CT site as required by their permit.

APPENDIX C – FUEL TYPE TRANSFER

Fuel Transfers

Natural gas to Liquid Fuel – Auto/Manual Operator Initiated Transfer

If manually transferring fuels lower the load on the Unit (40 – 60 MW), Initiate transfer and enter the start time of the transfer in the station log.

If Auto transfer due to loss of gas pressure. Select PRESELECTED load to current MW to keep unit from continuing to runback and eventually off line. Enter the start time of the transfer in the station log.

Confirm unit has successfully transferred to liquid fuel.

Observe Exhaust Spreads and Temperatures, confirm within normal limits.

Raise unit load to above Water Injection approximately 80MW.

Confirm Water Injection system has started and flow is established.

Observe Exhaust Spreads and Temperatures, confirm within normal limits.

Confirm NOX below 42 ppm on CEMS Polling Computer.

Enter the end time of the transfer in station log.

After verifying proper unit operation resume unit loading to meet required dispatch.

At the CEMS Polling Computer the alarm for exceedance should be acknowledged with a fuel transfer as the reason code.

Liquid Fuel to Natural Gas – Manual Operator Initiated Transfer

Lower unit load to 12MW.

Initiate transfer.

Enter the start time of the transfer in the station log.

Confirm unit has transferred to natural gas

Verify "0" water flow on CEMS computer

Observe Exhaust Spreads and Temperatures, confirm within normal limits

Raise load to above Mode 6 approximately 90MW.

Observe Exhaust Spreads and Temperatures, confirm within normal limits

Confirm NOX below 9 ppm on CEMS Polling Computer

Enter the end time of the transfer in the station log.

After verifying proper unit operation resume unit loading to meet required dispatch.

At the CEMS Polling Computer the alarm for exceedance should be acknowledged with a fuel transfer as the reason code.

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-11

APPENDIX D – RE-TUNING

RE-TUNING

In order to meet NO_x emission limits, Units 1 — 4 may require periodic re-tuning based upon maintenance or a change in test methods for fuel-bound nitrogen. Re-tuning may be required for either or both fuels. During retuning events, the unit(s) is ramped up at 5 MW increments all the way to 100% load. At each 5 MW increment, the unit(s) is tested and data are collected to produce a control curve for the units control system. The unit(s) is dropped back to minimum load, the new control curve is entered, and then the unit(s) is then ramped back up and data points are taken to ensure that the control curve meets the NO_x emission limits. This process is repeated until the unit is properly tuned. NO_x emissions and other pollutants may exceed short term emission limits during re-tuning events.

Note: Retuning conditions may vary based on ambient conditions

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-13

APPENDIX E – PHASE II ACID RAIN PERMIT APPLICATION

Dominion Remington Combustion Turbine Station
Permit Number: NRO40961
April 3, 2015
A-14

Dominion Resources Services, Inc.
5000 Dominion Boulevard, Glen Allen, VA 23060
Web Address: www.dom.com



Certified Mail – Return Receipt Requested

March 18, 2009

Mr. Terry H. Darton – Air Permit Manager
Virginia Department of Environmental Quality
Northern Virginia Regional Office
13901 Crown Court
Woodbridge, VA 22193-3801

**Re: Remington Combustion Turbine Station
Phase II Acid Rain Permit application
Source ID Number: 7839**



Dear Mr. Darton:

A Phase II Acid Rain Permit Application for Dominion's Remington Combustion Turbine Station is enclosed. A copy of the Certificate of Representation report from the CAMD website has also been included for your reference.

If you have any questions, please feel free to contact Liz Willoughby at (804) 273-3740 or Elizabeth.A.Willoughby@dom.com.

Sincerely,

A handwritten signature in cursive script that reads "Cathy C. Taylor".

Cathy C. Taylor
Director, Electric Environmental Services

Enclosures: Remington Combustion Turbine Station Acid Rain Permit Application
Certificate of Representation

Remington Combustion Turbine Station

Acid Rain - Page 2

Permit Requirements

STEP 3

Read the standard 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 source or unit, as appropriate, 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 source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; 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).

Remington Combustion Turbine Station

Acid Rain - Page 3

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (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.

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 source 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 source 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;

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Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (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.
- (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.
- (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

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Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source 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;

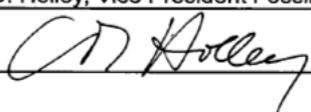
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4
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: C. D. Holley, Vice President Fossil & Hydro	
Signature 	Date 3/19/09



Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the title V permitting authority.

STEP 1 A Plant Code is a 4 or 5 digit number assigned by the Department of Energy=s (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, contact EIA at (202) 586-4325 or (202) 586-2402.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority=s operating permits regulation.

Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Acid Rain Hotline at (202) 343-9620.

Paperwork Burden Estimate

The public reporting and record keeping burden for this collection of information is estimated to average 8 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. **Do not send the completed form to this address.**