COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Blue Ridge Regional Office
www.deq.virginia.gov

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November 21, 2013

Mr. Frank Brayton
Station Director Power Generation System Operations
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

Location: New Canton
Registration No.: 32004
Air Number: 51-029-00028

Dear Mr. Brayton:

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

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

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

In the event that you receive this permit by mail, three days are added to the 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 call Terry Moore at 434-582-6251.

Sincerely,

Robert J. Weld
Regional Director

Attachment: Permit

cc: Director, OAPP (electronic file submission)

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Federal Operating Permit
Article 3

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

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

Permittee Name:	Virginia Electric and Power Company
Facility Name:	Bear Garden Generating Station
Facility Location:	2608 C.G. Woodson Dr. New Canton, VA 23123
Registration Number:	32004
Permit Number:	BRRO-32004

This permit includes the following programs:

Federally Enforceable Requirements – Clean Air Act
Federally Enforceable Requirements Title IV Acid Rain
Federally Enforceable Requirements – CAIR

Attachment A, Title IV Phase II Acid Rain Permit Application, 5 pages
Attachment B, CAIR Permit, 4 pages
Attachment C, Emissions Methodology - Trinity Consultants September 24, 2001 letter to Ms. Margaret Key (see item 2), 4 pages

Permit Effective Date: January 1, 2014
Permit Expiration Date: December 31, 2018

Permit Signature Date: November 21, 2013

Robert J. Weld
Regional Director

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ATTACHMENTS:
A– ACID RAIN PERMIT APPLICATION
B – CAIR PERMIT
C – EMISSIONS METHODOLOGY - TRINITY CONSULTANTS SEPTEMBER 24, 2001 LETTER TO MS. MARGARET KEY (SEE ITEM 2)

Facility Information

Permittee
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, VA 23060

Responsible Official
Frank Brayton
Station Director
Power Generation System Operations

Acid Rain Designated Representative
Edward H Baine
Vice President – Power Generation System Operations

Clean Air Interstate Rule (CAIR) Designated Representative
Edward H Baine
Vice President – Power Generation System Operations
EPA ID Number: 056807FACLTY

Facility
Bear Garden Generating Station
2608 C.G.Woodson Dr.
New Canton, VA 23123

Contact Person
Cathy Taylor
Director, Environmental Support
(804) 273-2929

County-Plant Identification Number: 51-029-00028
ORIS Code and/or EIA Facility ID: 56807

Facility Description: NAICS 221112
The Bear Garden Generation station is an electric power generation facility. Electric power is generated using two dual-fuel combustion turbines with associated heat recovery steam generators (HRSG), one tandem compound, reheat, condensing steam turbine receiving steam from two HRSG's, and the following ancillary equipment: one natural gas-fired auxiliary boiler, a natural gas pipeline heater, two 2.275 million gallon above ground distillate fuel oil storage tanks, one 10-cell cooling tower, one 6-cell chiller cooling tower, one 1000 kW emergency diesel generator, and one diesel engine driven fire suppression water pump.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
Unit 1A	SN001	GE Frame 7FA Combustion Turbine (CT)	CT – 1,887 MMBtu/hr (nominal) (Natural Gas) CT – 2,029 MMBtu/hr (nominal) (Distillate Oil low sulfur diesel)	Dry/Low-NOx Lean Premix Burners Selective Catalytic Reduction, Water Injection (oil fire only)	LNB1 SCR1 WINJ1	NOx	12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
1ADB	SN001	Heat Recovery Steam Generator (HRSG) with supplementary firing duct burners	400 MMBtu/h (nominal) (Natural Gas)	Selective Catalytic Reduction,	--- SCR1	NOx	12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
Unit 1B	SN002	GE Frame 7FA Combustion Turbine (CT)	CT – 1,887 MMBtu/hr (nominal) (Natural Gas) CT – 2,029 MMBtu/hr (nominal) (Distillate Oil low sulfur diesel)	Dry/Low-NOx Lean Premix Burners Selective Catalytic Reduction, Water Injection (oil fire only)	LNB2 SCR2 WINJ2	NOx	12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
1BDB	SN002	Heat Recovery Steam Generator	400 MMBtu/hr (nominal)	Selective Catalytic Reduction,	SCR2	NOx	12/31/03 (amended 3/13/09, 2/10/11 and

		(HRSG) with supplementary firing duct burners	(Natural Gas)				1/29/13)
EDG	SN010	Emergency Diesel Generator	600 kW (1200 HP) (nominal) Distillate Oil low sulfur diesel				12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
EDFP	SN011	Emergency Fire Pump	2.8 MMBtu/hr (315 HP @1760 rpm) (nominal) (Distillate Oil low sulfur diesel)				
AUXBLR	SN012	Auxiliary Boiler	25.1 MMBtu/hr (nominal) (Natural Gas)				12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
GPLHTR	SN014	Gas Pipe Line Heater	5.04 MMBtu/hr (nominal) (Natural Gas)				6/30/09
CWCTower	SN013	Cooling Tower, non-chromium based water treatment	One 10-cell 182,000 gal/min	Mist eliminator	ME	PM	12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
AICTower	SN015	Air Chiller System, non-chromium based water treatment	One 6-cell 12,133 gal/min	Mist eliminator	ME	PM	12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
T001		AST distillate oil storage tank	2.275 million gallon				12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)
T002		AST distillate oil storage tank	2.275 million gallon				12/31/03 (amended 3/13/09, 2/10/11 and 1/29/13)

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB)

Limitations

1. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B, 1BDB) - Limitations** - Nitrogen oxides (NO_X) emissions from each combustion turbine (CT) and heat recovery steam generator (HRSG) duct burner shall be controlled by "dry/low-NO_x" lean premix burners when firing natural gas and water injection when firing distillate fuel oil. The nitrogen oxides in the exhaust of the combustion turbines and duct burners shall be controlled by selective catalytic reduction (SCR) with ammonia injection. The combustion turbines, HRSGs and SCR equipment shall be provided with adequate access for inspection. The SCR equipment shall be in operation when the turbines are in normal operating mode (at all times except during startup and shutdown, as defined in Condition No.5).
(9 VAC 5-80-490 and Condition 3 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

2. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - The approved fuels for the combustion turbines and associated duct burners are:

For GE Frame 7FA turbines	**Turbines and duct burners** are allowed to burn natural gas with a maximum sulfur content of 0.6 grains per 100 dry standard cubic feet (a standard cubic foot of gas is defined as a cubic foot of gas at standard conditions as specified in 40 CFR 72.2 (68°F and 29.92 Hg)). **Turbines only** are allowed to burn distillate fuel oil with a maximum sulfur content of 0.01 percent by weight (see Condition 41 for definition of distillate oil).

A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-490, and Condition 13 and Appendix A of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

3. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - The duct burners shall operate only when the turbines are firing natural gas.
(9 VAC 5-80-490 and Condition 12 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

4. **Fuel Burning Equipment Requirements – (UNIT 1A and UNIT 1B) - Limitations** - The two combustion turbines (combined) shall consume no more than 21.08 x 10^6 gallons of distillate oil per year, calculated as the sum of each consecutive twelve (12) month period.
(9 VAC 5-80-490 and Condition 8 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

5. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - Emissions from the operation of each GE Frame 7 combustion turbine and associated duct burners shall not exceed the limits specified below in a and b:

a. Limits established by the 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13

	Short term limits Duct Burners off; CT Firing Gas (each unit)	**Short term limits Duct Burners on; CT Firing Gas (each unit)**	**Short term limits Duct Burners off; CT Firing Oil (each unit)**	**Annual limit (tons) (each unit)**
PM_{10} (includes condensable PM)	9.7 lb/hr	14.6 lb/hr	21.8 lb/hr	66.5
Sulfur Dioxide	3.1 lb/hr	3.8 lb/hr	20.9 lb/hr	22.8
Nitrogen Oxides (as NO2)	17.3 lb/hr 2.5 ppmvd	20.9 lb/hr 2.5 ppmvd	48.2 lb/hr 6.0 ppmvd	101.4
Carbon Monoxide	53 lb/hr	93.0 lb/hr	71.0 lb/hr	209.5
Volatile Organic Compounds	1.4 ppmvd	6.8 ppmvd	3.0 ppmvd	82.1
Sulfuric Acid Mist (H2SO4)	0.7 lb/hr	1.6 lb/hr	4.8 lb/hr	8.2

ppmvd = parts per million by volume on a dry gas basis, corrected to 15 percent O_2.

Short term emission limits represent averages for a three-hour sampling period, and apply at all times except during startup, shutdown, and malfunction. Periods considered startup and shutdown as defined as follows:

Startup for Oil and Natural Gas is defined as operation at loads between zero and 50%, not to exceed 5 hours, if the combustion turbine was not operated within the previous 8 hours (cold/warm starts) or not to exceed 2 hours if the combustion turbine was operated within the previous 8 hours

Shutdown for Oil is defined as the period of operation, normally 45 minutes, from when a turbine in continuous operation ramps down in power from 50% of maximum load until the unit is no longer being fired or producing emissions

Shutdown for Natural Gas is defined as the period of operation, normally 45 minutes, from when a turbine in continuous operation ramps down in power from 43% of maximum load until the unit is no longer being fired or producing emissions.

Deviations from short term limits (as detected by CEMS) shall be considered excursions and not violations so long as the duration of deviation does not exceed 5% of operating time for any single reporting period nor 3% of the operating time for any two consecutive reporting periods.

Annual emission limits are derived from the estimated overall emission contribution from operating limits, including periods of startup and shutdown. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-490 and Condition 18 and Appendix A of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

b. 40 CFR 60 Subpart KKKK regulated pollutants (i.e., sulfur dioxide and nitrogen oxide per §60.4315) emission limits for each unit:

i. Sulfur dioxide (SO2): Fuel which contains total potential sulfur emissions in excess of 0.060 lb SO_2 /MMBtu heat input shall not be burned per §60.4330(a)(2). The total sulfur content of the fuel shall be monitored per §60.4360, except for the demonstration of the allowable fuel sulfur content through documentation or representative fuel sampling as provided in §60.4365.

ii. Nitrogen oxide (NOx):
(a) CT firing natural gas with or without duct burning: 15 ppm at 15 percent O2 or 0.43 lb/MWh (§60.4320)

(b) CT operating at less than 75 % peak load and CT operating at temperatures less than 0 degrees F: 96 ppm @ 15 percent O2 or 4.7 lb/MWh (§60.4320)

(c) CT firing oil: 42 ppm at 15 percent O2 or 1.3 lb/MWh (§60.4325)

(d) Excess NOx emissions shall be identified from CEMS data per §60.4350

iii. Excess emissions shall be reported for all periods of CT operation, including start-up, shutdown, and malfunction per §60.4375(a).

(9 VAC 5-80-490 and 40 CFR 60 Subpart KKKK)

6. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - Sulfur dioxide (SO_2) emissions from each CT and HRSG duct burner shall be controlled by the use of low sulfur fuels (natural gas and low sulfur distillate).
(VAC 5-80-490 and Condition 4 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

7. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - Sulfuric Acid Mist (H_2SO_4) emissions from each combustion turbine and HRSG duct burner shall be controlled by the use of low sulfur fuels (natural gas and low sulfur distillate).
(9 VAC 5-80-490 and Condition 5 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

8. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - Visible Emissions from each combustion turbine/ HRSG stack shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-490 and Condition 21 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

9. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Limitations** - The permittee shall operate and maintain each stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
(9 VAC 5-80-490, 40 CFR Subpart KKKK 60.4333(a) and 40 CFR Subpart A 60.11(d))

Monitoring

10. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Monitoring – Fuel**

    a. For each shipment of distillate fuel oil the permittee shall obtain a certified fuel sulfur analysis as required in Condition 45 or conduct sampling as required in Condition 46.a.
    (9 VAC 5-80-490, Condition 16 and Appendix A of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

    b. For 40 CFR 60 Subpart KKKK: The permittee shall monitor the total sulfur content of the fuels used in the combustion turbine and HRSG as required by 40 CFR 60.4360; or, be exempted from monitoring by 40 CFR 60.4365 and demonstrate compliance either by fuel quality characteristics required in 40 CFR 60.4365(a) or representative fuel sampling data required in 40 CFR 60.4365(b).
    (9 VAC 5-80-490 and 40 CFR 60.4370(a))

11. **Fuel Burning Equipment Requirements – (UNIT 1A and UNIT 1B) - Monitoring – Fuel –**

    a. The combustion turbines shall be designed to accommodate devices to continuously monitor and record the fuel consumption meeting the specifications of 40 CFR 60.4345(c). Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the combustion turbines are operating.
    (9 VAC 5-80-490 and Condition 7 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

12. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Monitoring – CEM Operation –**

    a. Continuous Emission Monitoring Systems (CEMS), meeting the design specifications of 40 CFR Part 75, shall be installed to measure and record the emissions of nitrogen oxides (measured as NO_2), in ppmvd corrected to 15% O_2, from the combination of each combustion turbine and its duct burner. The CEMS shall also measure and record the oxygen content of the flue gas at each location where NO_x emissions are monitored, and measure heat input and power output in accordance with requirements of 40 CFR 60.4345.

    A CEMS shall also measure sulfur dioxide to comply with the requirements of 40 CFR Part 75 (acid rain program monitoring), unless an alternative method of determining sulfur dioxide emissions has been approved for that purpose.

    Each CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 75. For the purposes of this condition, data shall be reduced to 3-hour block averages.

    (9 VAC 5-80-490, Condition 28 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

    b. For 40 CFR 60 Subpart KKKK: Compliance with the NOx emission limits shall be demonstrated by installation, calibration and operation of a continuous monitoring system as described in 40 CFR 60.4345 and 40 CFR 60.13.
    (9 VAC 5-80-490, 40 CFR Subpart KKKK 60.4335(b) and 60.4340(b), and 40 CFR Subpart A 60.13)

13. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Monitoring –**

    a. A CEMS quality control program, which is equivalent to the requirements of 40 CFR 60.13, and Appendix F to 40 CFR Part 60 shall be implemented for all continuous monitoring systems.
    (9 VAC 5-80-490 and Condition 30 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

    b. For 40 CFR 60 Subpart KKKK: The NOx CEMS shall comply with 40 CFR Part 60.4345.

    (9 VAC 5-80-490 and 40 CFR 60 Subpart KKKK)

Recordkeeping

14. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. The following records required by the 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13:

        i. Annual throughput of distillate fuel oil and natural gas to each combustion turbine, calculated monthly as the sum of each consecutive 12-month period.

        ii. Annual throughput of natural gas to the duct burners for each combustion turbine calculated monthly as the sum of each consecutive 12-month period.

        iii. Periods of startup, shutdown, and malfunction of each combustion turbine. Periods of startup and shutdown shall be as defined in Condition 5.

        iv. Continuous records of power output for each combustion turbine.

        v. For each period when a combustion turbine fires distillate fuel oil, the date and time when fuel oil firing begins and ends, and other records sufficient to demonstrate that duct burners were not fired for the duration of each such period.

        vi. Fuel analysis records and supplier certifications sufficient to demonstrate compliance with Conditions 2, 10.a, 45 and 46.a pertaining to both natural gas and distillate oil. Test methods used for analysis or certification shall be as included in Part 75 (specifically for fuels with sulfur content in the permitted range) or alternate method approved by Blue Ridge Regional Office.

vii. Emissions calculations sufficient to verify compliance with the annual emission limitations in Condition 5, calculated monthly as the sum of each consecutive 12-month period, and records sufficient for calculating actual annual emissions from the remainder of the facility. Emissions shall be calculated using methodology proposed in correspondence from Trinity Consultants dated September 24, 2001 (see Attachment C), or other calculation methods approved by the Blue Ridge Regional Office.

viii. Continuous monitoring system data, calibrations and calibration checks, percent operating time, and excess emissions of the permitted emissions limits.

ix. Results of all stack tests, visible emission evaluations and performance evaluations.

(9 VAC 5-80-490, 9 VAC 5-50-410 and Condition 27 (a, b, c, d, e, h, k, l and m) of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

b. The following records required by 40 CFR 60 Subpart KKKK:

i. All fuel sampling results and other records required by 40 CFR Part 60 Subpart KKKK as they apply to the permitted emission units.

ii. Continuous monitoring system data, calibrations and calibration checks, percent operating time, and excess emissions of the applicable emission limits of 40 CFR Part 60 Subpart KKKK.

(9 VAC 5-80-490, Condition 27(i) 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13) and 40 CFR 60 Subpart KKKK)

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

(9 VAC 5-80-490)

15. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Recordkeeping** - 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, monitoring devices, and process equipment which affect such emissions:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

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 42 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Testing

16. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Testing** - The stacks from each combustion turbine/HRSG shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. (reference 40 CFR Part 60, Appendix A).
(9 VAC 5-80-490 and Condition 36 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Reporting

17. **Fuel Burning Equipment Requirements – (UNIT 1A, 1ADB, UNIT 1B and 1BDB) - Reporting** - The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from any process monitored by a continuous monitoring system (CEMS) on a quarterly basis, postmarked no later than the 30th day following the end of each calendar quarter. These reports shall include, but are not limited to:

    a. The following information required by the 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13:

        i. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;

        ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;

        iii. 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

iv. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

(9 VAC 5-80-490 and Condition 31 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

b. The following information required by 40 CFR 60 Subpart KKKK:

i. Identify excess emissions per §60.4350 for NOx limits as stated in §§60.4320(a) and 60.4325, and §60.4330 for SO2 limits;

ii. Report excess emissions and monitor downtime (as defined in§63.4380(b) for NOx and §63.4385 for SO2) in accordance with 40 CFR Subpart A 60.7 per §60.4375(a);

iii. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report in accordance with §60.7(c)(4);

iv. Submit reports per §60.4395.

(9 VAC 5-80-490 and 40 CFR 60 Subpart KKKK)

Ancillary Equipment Requirements – (CWCTower and AICTower; and T001 and T002)

Limitations

18. **Cooling Tower Requirements – (CWCTower and AICTower) - Limitations -** Particulate Matter (PM) from the steam turbine cooling tower and from the chiller cooling tower shall be controlled by the use of drift eliminators.
(9 VAC 5-80-490 and Condition 6 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

19. **Storage Tank Requirements – (T001 and T002) - Limitations** - The 2.275 million gallon above ground storage tanks shall store only distillate fuel oil or other petroleum-based liquids that have a true vapor pressure less than 3.5 kPa. Storage of any other substance may require a permit.
(9 VAC 5-80-490 and Condition 17 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Recordkeeping

20. **Storage Tank Requirements – (T001 and T002) - Recordkeeping** - The permittee shall maintain records of material stored in each tank and the vapor pressure of the material. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-490)

Fuel Burning Equipment Requirements – (GPLHTR)

Limitations

21. **Fuel Burning Equipment Requirements – (GPLHTR) - Limitations** - The approved fuel for the pipeline gas heater is natural gas.
(9 VAC 5-80-490 and Condition 3 of 6/30/09 Permit)

22. **Fuel Burning Equipment Requirements – (GPLHTR) - Limitations** - Emissions from the operation of the pipeline gas heater shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	0.20 lbs/hr	0.9 tons/yr
Volatile Organic Compounds	0.25 lbs/hr	1.1tons/yr
Carbon Monoxide	0.61 lbs/hr	2.7 tons/yr

(9 VAC 5-80-490 and Condition 5 of 6/30/09 Permit)

Recordkeeping

23. **Fuel Burning Equipment Requirements – (GPLHTR) – Recordkeeping** - The permittee shall maintain emission calculations and supporting data to demonstrate compliance with Conditions 21 and 22. These records shall be available on site for inspection by the DEQ and shall be current for the most recent (5) years.
(9 VAC 5-80-490)

Testing

24. **Fuel Burning Equipment Requirements – (GPLHTR) - Testing** - The pipeline gas heater shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested and safe sampling platforms and access shall be provided.
(9 VAC 5-80-490 and Condition 2 of 6/30/09 Permit)

Fuel Burning Equipment Requirements – (AUXBLR)

Limitations

25. **Fuel Burning Equipment Requirements – (AUXBLR) - Limitations** - The approved fuel for the auxiliary boiler is natural gas with a maximum sulfur content of 0.6 grains per 100 dry standard cubic feet (as defined in Condition No. 2). A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 and Condition 14 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

26. **Fuel Burning Equipment Requirements – (AUXBLR) - Limitations** - The auxiliary boiler shall consume no more than 102 x 10^6 scf of natural gas per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 and Condition 9 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

27. **Fuel Burning Equipment Requirements – (AUXBLR) - Limitations** - Sulfur dioxide (SO_2) emissions from auxiliary boiler shall be controlled by the use of low sulfur fuels (natural gas).
(9 VAC 5-80-490 and Condition 4 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Recordkeeping

28. **Fuel Burning Equipment Requirements – (AUXBLR) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters for the auxiliary boiler necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Daily, monthly, and annual throughput of natural gas, or alternate records as approved in writing by the Blue Ridge Regional Office. Annual throughput shall be calculated monthly as the sum of each consecutive 12 month period.

    b. Fuel analysis records or supplier certifications sufficient to demonstrate compliance with Condition 25 pertaining to natural gas. Test methods used for analysis or certification shall be as included in 40 CFR Part 75 (specifically for fuels with sulfur content in the permitted range) or an alternate method approved by Blue Ridge Regional Office.

    These records shall be available on site for inspection by the DEQ and shall be current for the most recent (5) years.
    (9 VAC 5-80-490, 9 VAC 5-50-410 and Condition 27.f and h of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Fuel Burning Equipment Requirements – (EDG and EDFP)

Limitations

29. **Fuel Burning Equipment Requirements – (EDG) - Limitations -** Emissions from the operation of the emergency diesel generator shall not exceed the limits specified below:

Nitrogen Oxides (as NO2)	25.0 lbs/hr	6.2 tons/yr

Annual emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 33.
(9 VAC 5-80-490, Condition 20 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

30. **Fuel Burning Equipment Requirements – (EDG) - Limitations –** Visible emissions from the emergency diesel generator shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-490, Condition 21 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

31. **Fuel Burning Equipment Requirements – (EDG and EDFP) - Limitations -** The approved fuel for the emergency generator and the diesel emergency fire suppression pump is distillate fuel oil, as defined in Condition 41, with a maximum sulfur content of 0.0015 percent by weight. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 and Condition 15 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13, 40 CFR 60 Subpart IIII)

32. **Fuel Burning Equipment Requirements – (EDG and EDFP) - Limitations -** Sulfur dioxide (SO_2) emissions from the emergency generator and the fire suppression water pump shall be controlled by the use of low sulfur fuels (low sulfur distillate).
(9 VAC 5-80-490 and Condition 4 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

33. **Fuel Burning Equipment Requirements – (EDG) - Limitations -** The emergency diesel generator shall consume no more than 36,000 gallons of distillate fuel oil per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 and Condition 10 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

34. **Fuel Burning Equipment Requirements – (EDFP) - Limitations -** The fire suppression water pump shall consume no more than 5,000 gallons of distillate fuel oil per year, calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-490 and Condition 11 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

35. **Fuel Burning Equipment Requirements – (EDG and EDFP) - Limitations -** The emergency generator and fire suppression water pump shall be operated in compliance with requirements of 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE), which include the following:

    a. Compliance with the emission standards of §60.4205(b) for the emergency generator and §60.4205(c) for the fire suppression water pump shall be demonstrated by purchasing a certified engine per §60.4211(c).

    b. The emission standards shall be achieved for the life of the engines per §60.4206.

    c. Engines must be installed and configured according to the manufacturer's emission-related specifications per §60.4211(c).

    d. The permittee shall purchase diesel fuel that meets the fuel standards of 40 CFR 80.510(b) per §60.4207(b).

    e. Engines shall be equipped with a non-resettable hour meter per §60.4209, and the meter shall be provided with adequate access for inspection.

    f. The permittee shall comply with the compliance requirements of §60.4211(a).

    g. The permittee shall operate the emergency engines in accordance with §60.4211(f).

    h. The permittee shall comply with the applicable requirements of §60.4211(g).

    i. The permittee shall comply with the General Provisions requirements of 40 CFR 60 Subpart A as specified in §60.4218, Table 8.

    (9 VAC 5-80-490 and 40 CFR 60 Subpart IIII)

36. **Fuel Burning Equipment Requirements – (EDG and EDFP) - Limitations -** The emergency generator engine and the fire suppression water pump shall show compliance with 40 CFR Part 63 Subpart ZZZZ by demonstrating compliance with 40 CFR Part 60 Subpart IIII, with "emergency" being defined as stated in 40 CFR 63.6675.
(9 VAC 5-80-490 and 40 CFR 63.6590(c))

Recordkeeping

37. **Fuel Burning Equipment Requirements – (EDG and EDFP) - Recordkeeping** - The permittee shall maintain records of all 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 Blue Ride Regional Office.

    a. These records shall include, but are not limited to, the following:

        i. Annual throughput of distillate fuel oil to each of: the emergency diesel generator, and the diesel emergency fire suppression water pump, calculated monthly as the sum of each consecutive 12 month period.

        ii. Fuel analysis records or supplier certifications sufficient to demonstrate compliance with Condition 31 pertaining to distillate oil. Test methods used for analysis or certification shall be as included in Part 75 (specifically for fuels with sulfur content in the permitted range) or an alternate method approved by Blue Ridge Regional Office.

        iii. Emissions calculations sufficient to verify compliance with the annual emission limitations for the generator as stated in Condition 29 calculated monthly as the sum of each consecutive 12-month period, and records sufficient for calculating actual annual emissions. Emissions shall be calculated using methodology proposed in correspondence from Trinity Consultants dated September 24, 2001, or other calculation methods approved by the Blue Ridge Regional Office (see Attachment C for approved methodologies).

        iv. For each emergency diesel generator and diesel emergency fire suppression water pump the annual operating hours and the reason the engine was in operation during that time.

    (9 VAC 5-80-490 and Condition 27.g, h and k of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

    b. The following records required by 40 CFR 60 Subpart IIII:

        i. Total annual operating hours per year for each engine, calculated monthly as the sum of each consecutive 12 month period.

        ii. Records showing that the engines for the generator and water pump are certified engines to emission standards of Subpart IIII.

        iii. Records showing that the fuel oil purchased for the generator and fire pump meet the specifications stated in 40 CFR 80.510(b).

iv. Records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. Also, record the time of operation of the engine and the reason the engine was in operation during that time.

v. Records of hours of operation to demonstrate compliance with the 50 and 100 hours per year operation of 40 CFR 60.4211(f).

vi. Manufacturer's written instructions.

(9 VAC 5-80-490 and 40 CFR Subpart III)

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

(9 VAC 5-80-490 and 40 CFR Subpart IIII)

Testing

38. **Fuel Burning Equipment Requirements – (EDG) - Testing** - The stack from the emergency diesel generator shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. (reference 40 CFR Part 60, Appendix A)
(9 VAC 5-80-490 and Condition 36 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Facility Wide Conditions

Limitations

39. **Facility Wide Conditions** – Each Stationary combustion turbine, as defined in 40 CFR §60.4420, is subject to the applicable requirements of 40 CFR 60 Subparts KKKK and A, including to but not limited to those requirements identified in this permit.
(9 VA C 5-80-490, and 40 CFR §60.4305 and §60.1)

40. **Facility Wide Conditions – (GPLHTR, AUXBLR and EDFP) Emission Limitation** - Visible emissions from each stack, except the combustion turbine/ HRSG stack(s) and the emergency generator, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent. This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-490 and 9 VAC 5-50-80)

41. **Facility Wide Conditions – (UNIT 1A, UNIT 1B, EDG and EDFP) Emission Limitation** - Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396 incorporated by reference, 40 CFR 60.17 "Standard Specification for Fuel Oils." (9 VAC 5-80-490 and Condition 13 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

42. **Facility Wide Conditions - Maintenance/Operating Procedures** - 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, monitoring devices, and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    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 42 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

43. **Facility Wide Conditions - Violation of Ambient Air Quality Standard** – The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated (9 VAC 5-80-490, 9 VAC 5-80-650 and Condition 41 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13, and Condition 13 of 6/30/09 Permit)

44. **Facility Wide Conditions – Registration/Update** - Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.
(9 VAC 5-80-490 and Condition 45 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

Monitoring

45. **Facility Wide Conditions – (UNIT 1A, 1ADB, UNIT 1B, 1BDB, EDG and EDFP) - Monitoring** - The permittee shall perform fuel sulfur monitoring as stated in Condition 46.a or obtain a certified fuel sulfur analysis from the fuel supplier with each shipment of distillate fuel oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the distillate fuel oil was received;

    c. The volume of distillate fuel oil delivered in the shipment; and

    d. The sulfur content of the distillate fuel oil.

    (9 VAC 5-80-490 and Condition 16 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

46. **Facility Wide Conditions – (UNIT 1A, 1ADB, UNIT 1B, 1BDB, EDG and EDFP) - Monitoring** – Fuel oil sampling shall be performed as follows:

    a. For the sampling required by Conditions 10.a and 45, by one of the following:

        i. Testing each individual tanker truck before the fuel oil is added to the on-site storage tank, or

        ii. Testing the on-site storage tank following the receipt of every fuel oil shipment that is directly preceded by using fuel oil from the on-site storage tank.

        iii. By sampling the fuel oil at a single refinery tank if:

(a) all the fuel delivered in the same shipment comes from one refinery tank and
(b) the tank is not refilled between the first and last tanker truck loading.

(9 VAC 5-80-490, Appendix A of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13, and 40 CFR 60.4370(a))

b. If the total sulfur sampling compliance option of 40 CFR 60 Subpart KKKK (as stated in Condition 10.b) is selected, sampling shall be performed per 40 CFR 60.4370(a).

(9 VAC 5-80-490 and 40 CFR 60 Subpart KKKK)

47. **Facility Wide Conditions – (UNIT 1A, 1ADB, UNIT 1B, 1BDB GPLHTR, AUXBLR, EDG and EDFP) - Monitoring** - Visual emissions observations shall be performed for the fuel burning equipment as listed below in a and b:

a. For each CT/HRSG and the Emergency Generator exhaust stack the visible emissions observations shall be conducted at least once per week; and if visible emissions are observed from any stack, the permittee shall:

i. Take timely corrective action such that the affected unit resumes normal operation and there are no visible emissions from the exhaust stack, or

ii. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 on the affected unit as follows: To assure visible emissions from the affected unit do not exceed 10 percent opacity the VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 10 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the affected unit resumes operation with the visible emissions of 10 percent of less.

(9 VAC 5-80-490 and Condition 35 of 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13)

b. For the Gas Pipeline Heater, Auxiliary Boiler and Emergency Fire Pump exhaust stacks the visible emissions observations shall be conducted at least once per week; and if visible emissions are observed from any stack, the permittee shall:

i. Take timely corrective action such that the affected unit resumes normal operation and there are no visible emissions from the exhaust stack, or

ii. Perform a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 on the affected unit as follows: To assure visible

emissions from the affected unit do not exceed 10 percent opacity the VEE shall be conducted for a minimum of six minutes. If any of the observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the affected unit resumes operation with visible emissions standard as stated in Condition 40.

(9 VAC 5-80-490)

Recordkeeping

48. **Facility Wide Conditions - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

    a. Fuel sulfur monitoring records or certified fuel sulfur analyses as specified in Condition 45.

    b. Records to demonstrate compliance with Condition 47, with the following information included: date and time of the observations, the name of the observer, whether or not there were visible emissions, results of all VEEs, any necessary corrective action, and if the equipment has not been operated during the week that a visual observation was not required.

    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 5-80-490 and 40 CFR Subpart A 60.7)

49. **General Conditions – Record of Malfunctions** - 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.
    (9 VAC 5-0-490, 9 VAC 5-80-650 <u>and Condition 11 of 6/30/09 Permit)</u>

Testing

50. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
    (9 VAC 5-80-490)

51. **Facility Wide Conditions - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490)

Insignificant Emission Units

52. **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	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity 9 VAC 5-80-720C)
IS-1	Lube Oil Systems/Waste Oil Systems/Hydraulic Oil Systems	9 VAC 5-80-720 B	VOC	---
IS-2	No. 2 Fuel Oil Truck Unloading/Loading Station	9 VAC 5-80-720 B	VOC	---

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

Permit Shield & Inapplicable Requirements

53. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Compound Storage Vessels	The capacity of each tank and the vapor pressure of the fuel oil stored in the tanks meet the following exemption requirements of 40 CFR 60.110b(b): capacity greater than or equal to 151 m^3 storing a liquid with a maximum true

		vapor pressure less than 3.5 kilopascals (kPa). Therefore, 40 CFR 60 Subpart Kb does not apply to Tanks T001 and T002.
40 CFR 64	Compliance Assurance Monitoring (CAM)	Condition 28 of the 12/31/03 Permit, as amended 3/13/09, 2/10/11 and 1/29/13, requires CEMS to demonstrate compliance with permitted NOx emissions limits for the CT/ HRSG units. Therefore, these units are not subject to CAM per 40 CFR 64.2(b)(1)(vi).
40 CFR 63 Subpart DDDDD	Industrial Boiler MACT	The auxiliary boiler is not located at a major source of HAPs therefore 40 CFR 63 Subpart DDDDD does not apply to the auxiliary boiler.

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 (i) 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 5-80-490 and 9 VAC 5-80-500)

General Conditions

54. **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 5-80-490 N)

55. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-430, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

56. **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 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

57. **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 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

58. **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 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

59. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

60. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 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 5-80-430 B, C and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

61. **General Conditions - Recordkeeping and Reporting** - 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; and

f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-490 F)

62. **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 5-80-490 F)

63. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

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 (CAM) 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 5-80-490 F)

64. **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 for the period ending December 31. 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. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

    a. The time period included in the certification. The time period to be addressed is January 1 to December 31;

    b. The identification of each term or condition of the permit that is the basis of the certification;

    c. The compliance status;

    d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;

    e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;

    f. Such other facts as the permit may require to determine the compliance status of the source; and

    g. 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 5-80-490 K.5)

65. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC

5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 63 of this permit.
(9 VAC 5-80-490 F.2 and 9 VAC 5-80-250)

66. **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 the malfunction is discovered, notify the Blue Ridge Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40 (see Conditions 67 and 68). When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.
(9 VAC 5-80-490, 9 VAC 5-20-180 C and 9 VAC 5-80-650)

67. **General Conditions - Failure/Malfunction Reporting -** The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.
(9 VAC 5-80-490, 9 VAC 5-20-180 C and 9 VAC 5-50-50)

68. **General Conditions - Failure/Malfunction Reporting -** The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are listed below:

    a. UNIT 1A and 1ADB

    b. UNIT 1B and 1BDB

    (9 VAC 5-80-490, 9 VAC 5-20-180 C and 9 VAC 5-50-50)

69. **General Conditions - Failure/Malfunction Reporting -** Each owner required to install a continuous monitoring system (CMS) or monitoring device 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 subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:

a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B.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.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.

(9 VAC 5-80-490, 9 VAC 5-20-180 C and 9 VAC 5-50-50)

70. **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 5-80-490 G.1)

71. **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 ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-490 G.2)

72. **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 5-80-490 G.3)

73. **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 5-80-360, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-490 G and L)

74. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490 G.5)

75. **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 5-80-110 G.6)

76. **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 5-80-80 G.
(9 VAC 5-80-490 K.1)

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

78. **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 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 tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-80-490 and 9 VAC 5-50-90)

79. **General Conditions - Startup, Shutdown, and Malfunction -** At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination 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 5-80-490 and 9 VAC 5-50-20 E

80. **General Conditions - Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-500 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-490 J)

81. **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 times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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

82. **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 years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-430 F. The conditions for reopening a permit are as follows:

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 5-80-490 D.

(9 VAC 5-80-490 L)

83. **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 5-80-150 E)

84. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-490)

85. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-490)

86. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-490)

87. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 88 are met. (9 VAC 5-80-490 and 9 VAC 5-80-650)

88. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

    a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

    b. The permitted facility was at the time being properly operated.

    c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

    d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b 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.

    (9 VAC 5-80-490 and 9 VAC 5-80-650)

89. **General Conditions - Malfunction as an Affirmative Defense -** In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-490 and 9 VAC 5-80-650)

90. **General Conditions - Malfunction as an Affirmative Defense -** The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-490 and 9 VAC 5-80-650)

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

92. **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 submit 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 5-80-430 E)

93. **General Conditions - Stratospheric Ozone Protection -** If the permittee handles or emits one or more Class I or II substances 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 and Subparts A-F)

94. **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 5-80-4900 A.1)

95. **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 by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

96. **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 5-80-490 I

97. **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 5-80-490 I)

Title IV Requirements

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

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

100. **Title IV Requirement - SO_2 Allowance Allocations and NOx Requirements** - SO2 allowance allocations and NOx requirements for the affected units

		2014	2015	2016	2017	2018
Unit 1 and Unit 2	SO_2 allowances, allocated by U.S. EPA (tons)	None[1]	None[1]	None[1]	None[1]	None[1]
	NO_x limit	Not applicable[2]				

[1] See Condition 101.b
[2] See Condition 101.c

101. **Title IV Requirement - Additional Requirements, Comments, Notes, and Justifications**
   a. Dominion Generation shall submit a complete permit application that includes all of the information required under 40 CFR §§72.21 and 72.31 at least 6 months, but no earlier than 18 months, prior to the date of expiration of the existing Title IV, Phase II, Acid Rain permit. EPA forms shall be used.
   (9 VAC 5-80-430 C.5)

   b. These units (Units 1 and 2) were not eligible for SO_2 allowance allocations by U.S. EPA under Section 405 of the Clean Air Act and the Acid Rain Program. SO_2 allowances may be acquired from other sources in addition to those allocated by U.S. EPA. No revision to this permit is necessary in order for the owners and operators of these units to hold additional allowances recorded in accordance with 40 CFR Part 73. The owners and operators of these units remain obligated to hold sufficient allowances to account for SO_2 emissions from this unit in accordance with 40 CFR 72.9(c)(1).
   (9 VAC 5-80-420 C.1 and H.1 and 9 VAC 5-80-490 O)

   c. Units 1 and 2 are natural gas/distillate oil fired combustion turbines and therefore, not subject to NOx limitations under 40 CFR Part 76.
   (9 VAC 5-80-490 and 40 CFR Part 76)

Clean Air Interstate Rule (CAIR) Requirements

102. The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., 9 VAC 5-140-5010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit. The CAIR Permit is Attachment B to this document and expires upon expiration of this Title V permit.
(9 VAC 5-80-490, 40 CFR Part 96 and 9 VAC 5 Chapter 140)

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: [X] new [ ] revised [ ] for Acid Rain permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Bear Garden Generating Station Facility (Source) Name	VA State	56807 Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1A	Yes
1B	Yes

Bear Garden Generating Station
Facility (Source) Name (from STEP 1)

STEP 3

Read the standard requirements.

Permit Requirements

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

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the 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).

Bear Garden Generating Station
Facility (Source) Name (from STEP 1)

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;

Bear Garden Generating Station
Facility (Source) Name (from STEP 1)

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

Bear Garden Generating Station
Facility (Source) Name (from STEP 1)

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.

Charles D. Holley, Vice President Fossil & Hydro System Operations Name	
Signature Charles D Holley	Date 12/22/2008

CAIR Permit Application

(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: × New Revised

STEP 1
Identify the source by plant name, State, and ORIS or facility code

Plant Name	State	ORIS/Facility Code
Bear Garden Generating Station	VA	56807

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_X Annual	SO_2	NO_X Ozone Season
1A	X	X	X
1B	X	X	X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable).

STEP 3, continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) with the CAIR NO_X emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_X Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_X unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Bear Garden Generating Station

Plant Name (from Step 1)

STEP 3, continued

(d) Excess emissions requirements.
If a CAIR NO_X source emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_X Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.
(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) 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 before the end of 5 years, in writing by the permitting authority or the Administrator.
(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; 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 under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 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 CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).
(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).
(2) The CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(f) Liability.
(1) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).
(2) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X Ozone Season units (as applicable) at the source.
(3) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Bear Garden Generating Station
Plant Name (from Step 1)

STEP 3, continued

(g) Effect on Other Authorities.
No provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or 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.

Charles D. Holley, Vice President Fossil & Hydro System Operations	
Name	
Signature Charles D Holley	Date 12/22/2008

Trinity Consultants

DEQ SCRO
SEP 27 2001
LYNCHBURG

September 24, 2001

Ms. Margaret Key
Environmental Engineer - Senior
Department of Environmental Quality
South Central Regional Office
7750 Timberlake Road
Lynchburg, VA 24502

RE: Response to Request for Additional Analysis
Tenaska Bear Garden Generating Station
Tenaska Virginia II Partners, L.P., Buckingham County, Virginia

Dear Ms. Key:

This letter is in response to the Virginia Department of Environmental Quality's (VDEQ's) request for additional analysis that was discussed during a phone call on September 17, 2001 between you and Trinity Consultants, regarding the Tenaska Bear Garden Generating Station Prevention of Significant Deterioration (PSD) permit application. This letter provides a formal and thorough response to the each of the PSD permit application items that may require additional analysis. Each item requiring further analysis that was identified in the September 17, 2001, phone call, followed by Tenaska's response, is listed below:

1. In Tenaska's Best Available Control Technology (BACT) Analysis, the assumed control equipment useful life for carbon monoxide (CO) catalytic oxidizers was set to 10 years. The VDEQ has asked why 20 years was not used in this analysis.

   For CO catalytic oxidation, it was estimated that the control technology would cost $5,781 per ton of CO controlled using a control device efficiency of 90%, a useful life of 10 years, and an interest rate of 7%. The BACT analysis cost spreadsheet was set up in accordance with the latest available version of the Office of Air Quality Planning and Standards (OAQPS) Cost Manual (Fifth Edition, EPA 453/B-96-001, February 1996). All of the example spreadsheets for catalytic devices in the OAQPS Cost Manual use 10 years as the useful life estimate, as detailed Sections 2.4.3 and 3.5.2.2. In addition, the useful life estimates for all types of control devices discussed in the OAQPS Cost Manual are consistent with "average" equipment life estimates detailed in the July 24, 1987, EPA Memo by Robert Bauman, which is included as Attachment 1 to this letter. It does not appear that there is any guidance that recommends the use of "high" equipment life estimates (i.e. 20 years for catalytic devices) for any type of control device.

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Tenaska would further note that the cost of CO catalytic oxidation using a control device efficiency of 90%, a useful life of 20 years, and an interest rate of 7%, would still be greater than $5,000 per ton of CO controlled.

2. The VDEQ requested that Tenaska propose a methodology for calculating actual emissions from the facility for annual reporting purposes. The VDEQ indicated that the methodology would not be included in the permit itself, but would be included in the permit engineering analysis. This methodology can be changed in the future without modifying the permit, by requesting a revision that meets the VDEQ's approval.

   For calculating oxides of nitrogen (NO_X) emissions from the combined combustion turbine and heat recovery steam generating units (CCCTs), Tenaska proposes to use CEM data to calculate annual emissions in a manner that also complies with 40 CFR Part 75. For calculating sulfur dioxide (SO_2) emissions from the CCCTs, Tenaska proposes methods that are consistent with the monitoring requirements of 40 CFR Part 75, Appendix D.

   For calculating particulate matter (PM_{10}), volatile organic compounds (VOC), and CO emissions from the CCCTs, Tenaska proposes to utilize 40 CFR Part 75 compliant heat input data and the maximum observed emission rate data available from the most recent stack testing for the CTs and the HRSGs, in pounds of pollutant per million British thermal unit (lb/MMBtu) of fuel burned. Separate emission factors for the HRSGs will be derived by subtracting the test results for the CTs from the test results for the CCCTs. Tenaska will use the maximum emission rates observed for each fuel for all operating loads. Tenaska will calculate actual PM_{10}, CO, and VOC emissions on an annual basis.

   HAP emissions will be calculated using actual fuel usage and emission factors contained in the permit application or approved by the VDEQ.

   To calculate emissions from the black start diesel generators, the emergency diesel generator and the diesel fire water pump, Tenaska proposes to monitor the hours of operation for each of these units. The annual hours of operation will then be multiplied by the maximum potential emission rates for each pollutant, as listed in the permit application in pounds per hour.

   To calculate emissions from the auxiliary boiler, Tenaska proposes to monitor the total natural gas fired in the unit and multiple this value by the maximum potential emission rate for each pollutant, as listed in the permit application, in pounds of pollutant per MMBtu.

3. The VDEQ requested that Tenaska give examples of other state agencies that have approved PM_{10} compliance testing that takes into account the background PM concentration (i.e. the concentration of PM in the inlet air to the combustion turbines).

   General Electric, who is supplying the combustion turbines for the Buckingham County site, excludes inlet particulate matter from their performance guarantee with respect to this

pollutant. Tenaska's objective is that permit conditions be consistent with available manufacturer performance guarantees. For example, the state of Louisiana routinely subtracts a background PM concentration from stack testing results for natural gas fired combustion units (including CTs and CCCTs). The background PM concentration is obtained through ambient sampling near the source during the stack testing. Mr. Jim Courville, Louisiana Department of Environmental Quality, is the appropriate contact person to direct any questions regarding this compliance testing technique.[1]

4. In addition to the Tenaska Bear Garden Generating Station, which will be located in Buckingham County, Virginia, an affiliate of Tenaska has also applied for a PSD permit for a similar facility in Fluvanna County, Virginia. The VDEQ has requested additional information that will support Tenaska's determination that the two facilities are separate major sources under the PSD and Title V regulations.

   Tenaska is requesting that the VDEQ concur with our determination that the facilities are separate sources for the following reasons:

   - *The proposed Fluvanna County site is approximately 13 miles from the proposed Buckingham County site. Tenaska will not own or lease any tract of land that connects these two sites. Therefore, the sites are not located on adjacent or contiguous pieces of property.*
   - *The two plants will not be dependent on each other in any way; both plants will be able to operate and sell power regardless of whether the other plant is running or even constructed.*
   - *There are no roadways or railways that connect the two facilities that are owned by Tenaska or any of its affiliates, and materials will not frequently be shipped between the two sites*
   - *There are no financial arrangements between the two facilities; each will be constructed and sell power independently from the other. The power produced by the two facilities will also enter the grid at separate interconnect locations.*
   - *The Buckingham and Fluvanna County sites will both be supplied with raw water from the James River by East Coast Transport, Inc. (ECTI), which is a public service corporation regulated by the Virginia State Corporation Commission and a Tenaska affiliate. ECTI is a privately owned public utility with obligations to serve the public under Virginia law. The use of a common water utility owned by Tenaska does not, in any way, link the operations of the two sites.*
   - *The preamble to the PSD regulations clarifies that the definition of a source as follows: "EPA has stated in the past and now confirms that it does not intend 'source' to encompass activities that would be many miles apart along a long-line operation".*[2] *In*

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[1] Mr. Jim Courville, Environmental Chemical Specialist Advanced, acts as the contact for the emissions testing program and coordinates all stack testing activities for the Louisiana Department of Environmental Quality, Environmental Technology Division, Engineering Group 1 (EG1). Mr. Courville can be reached by phone at (225) 765-0276 or by electronic mail at james_c@deq.state.la.us.

[2] Federal Register, Volume 45, No. 154, Thursday, August 7, 1980, page 52695.

addition, recent EPA guidance memos state that the type of nexus (relationship) between two facilities should be examined to determine if the facilities are operated as a single source.[3] *Based on the information provided in this letter, it is readily apparent that the facilities are not a single source in regards to the PSD and Title V regulations.*

5. Per your request, an updated Form 7 with all associated changes to the application that have been discussed with the VDEQ will be submitted immediately following the issuance of a preliminary draft permit, prior to the first public notice by the VDEQ.

We look forward to the timely issuance of a draft PSD permit for the proposed facility. If you have any questions or comments about the information in this response letter, please do not hesitate to call either Dr. Greg Kunkel, Tenaska, at (402) 691-9587 or me at (704) 553-7747.

Sincerely,

TRINITY CONSULTANTS

Paul Greywall

Paul Greywall
Manager – Charlotte Office

cc: Dr. Greg Kunkel, Tenaska
Mr. Walt Russell, Tenaska

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[3] Memo from Kathleen Henry, Chief, Permits and Technical Assessment Branch, EPA Region 3, to Mr. John Slade, Chief, Division of Permits, Pennsylvania DEP. The memo is available on the EPA website at the following address: http://www.epa.gov/rgytgmj/programs/artd/air/nsr/nsrmemos/usnpsdf1.pdf.