



COMMONWEALTH of VIRGINIA

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COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
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STATEMENT OF LEGAL AND FACTUAL BASIS

Virginia Electric and Power Company
Possum Point Power Station
19000 Possum Point Road
Dumfries, Virginia
Permit No. NRO70225

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Virginia Electric and Power Company has applied for a Title V Operating Permit for its Possum Point Power Station facility. The Department has reviewed the application and has prepared a proposed Title V Operating Permit.

Engineer/Permit Contact: _____ Date:

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FACILITY INFORMATION

Permittee

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

Facility

Dominion - Possum Point Power Station
19000 Possum Point Road
Dumfries, Virginia 22060

County-Plant Identification Number: 51-153-0002

SOURCE DESCRIPTION

NAICS Code: 221112 - Electric power generation, fossil fuel.

The facility is an electrical power generation plant that produces power for sale. The significant emissions units of the plant consist of: two natural gas or oil-fired combustion turbine generating units; two natural gas-fired boiler generation units; one oil-fired boiler generation unit; six small, peaking oil-fired combustion turbines; one natural gas-fired auxiliary steam boiler; two natural gas-fired gas pipeline heaters; and four above ground oil storage tanks. There is also a steam turbine generating unit that utilizes steam produced from waste heat exhausted from the two primary combustion turbines and from additional heat supplied as needed by duct burners on the primary combustion turbine exhaust ducts. The duct burners are significant emission units, and for permitting purposes are considered independent of the steam turbine unit, which has no direct emissions associated with it.

The facility is a Title V major source of particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), hydrogen chloride (HCl), and hydrogen fluoride (HF). This source is located in a designated "moderate" nonattainment area for the 8-hour ozone standard and a nonattainment area for the PM_{2.5} standard. It is a PSD major source. The facility was previously permitted under: a Consent Agreement (only VOC RACT part still in force) signed 6/12/95; State Operating Permits issued 7/21/00 and 9/26/00; a Prevention of Significant Deterioration/Non-attainment Permit issued on 10/05/01 and amended on 11/18/02, 12/8/04, 7/11/08, 5/20/11, 6/11/13, 9/30/14, and 3/20/15; a Phase-II Acid Rain Permit issued 2/28/03; and subject to a federally-enforceable Consent Decree issued 10/10/03. The facility was issued a Title V federal operating permit under the authority and procedures of 9VAC5-80, Part II, Article 3, on 1/20/09. That federal operating permit was modified on 2/10/10 and 5/25/11, when the term of the permit was shortened from 5 to 4 years to allow the expiration of the permit to coincide with the permit term for a Title IV federal acid rain permit, which was to expire 12/31/12. Because Dominion submitted on behalf of this facility a timely and complete renewal application on June 18, 2012, which is between 18 and 6 months ahead of the expiration date, the facility has operated from 1/1/13 to the date of issuance under the expired permit by authority of the application shield provided at 9VAC5-80-430. A complete Acid Rain Permit application (attached as Appendix C) was submitted on June

28, 2012. The term of this permit begins January 1, 2015 and expires on December 31, 2019 to have a five-year term that begins and ends on calendar years to match the allowance tracking per 40 CFR 72.90(b). 9VAC5-80-510 C.4.e requires that the five years term commence on its effective date, so the effective date for the Acid Rain permit portion of this permit is stated as January 1, 2015. The effective date for the Title V federal operating permit portion of this permit is the date of issuance, so that the permittee cannot unfairly be found in violation of any new requirements of this permit that were not otherwise in effect until this permit was issued. The expiration date of all portions of this permit is December 31, 2019 to avoid confusion that different expiration dates could cause and to conform to DEQ policy.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted on July 30, 2014. At the time of inspection, the facility was found to be in compliance. In addition, all reports and other data required by permit conditions or regulations, which are submitted to the DEQ, are evaluated for compliance. Those reports and other data have generally showed the facility to be in compliance, but a Notice of Violation dated April 13, 2011, was issued to the permittee citing emissions in excess of those allowed for the Unit 5 boiler stack by the "Title V Permit". No case decision has been issued regarding the alleged violation, so no compliance plan (for purposes of 9VAC5-80-440 I) has been attached to the proposed permit or the permit application.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following :

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment / Utility Units							
ES-3	EP-3	(Unit 3) Tangentially-fired natural gas boiler - Combustion Engineering – built 1955, converted from coal firing in 2003.	1,150 million Btu/hr	Low-NO _x burners	N/A	NO _x	Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO _x RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03; Consent Decree, 10/10/03
ES-4	EP-4	(Unit 4) Tangentially-fired natural gas boiler - Combustion Engineering – built 1962, converted from coal firing in 2003.	2,350 million Btu/hr	Low-NO _x burners	N/A	NO _x	Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO _x RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03; Consent Decree, 10/10/03
ES-5	EP-5	(Unit 5) Tangentially-fired oil boiler - Combustion Engineering – built 1975. Fired w/ No.6 fuel oil during normal operation; No. 2 fuel oil during ignition and flame stabilization.	8,500 million Btu/hr (860 million Btu/hr during flame stabilization.)	Multicyclone – Universal Oil Product	EC-5	PM, PM ₁₀ , Pb, As, Co, Mn, Ni, Se	Permit to Construct & Operate, 2/7/73; Consent Agreement (VOC RACT part, only), 6/12/95; State Operating Permit (NO _x RACT), 7/21/00; State Operating Permit (Ozone Attainment), 9/26/00; Phase-II Acid Rain Permit, 2/28/03

ES-6	EP-6	(Unit 6) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-7	EP-7	(Unit 7) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-8	EP-8	(Unit 8) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-9	EP-9	(Unit 9) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-10	EP-10	(Unit 10) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00
ES-11	EP-11	(Unit 11) No.2 oil-fired combustion turbine – General Electric Model MS5001L – built 1968	245 million Btu/hr at 80°F inlet	None	-	-	State Operating Permit (Ozone Attainment), 9/26/00

ES-13	EP-13	(Unit 6A) Combined Cycle Combustion Turbine – General Electric Model PG7241 (FA) - fired w/natural gas or distillate fuel oil - built 2003	2,023 million Btu/hr on gas; 2,092 million Btu/hr on oil	Selective Catalytic Reduction (SCR)	SCR 6A	NO _x	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03
ES-14	EP-14	(Unit 6B) Combined Cycle Combustion Turbine – General Electric Model PG7241 (FA) - fired w/natural gas or distillate fuel oil – built 2003	2,023 million Btu/hr on gas; 2,092 million Btu/hr on oil	Selective Catalytic Reduction (SCR)	SCR 6B	NO _x	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03
ES-15	EP-13	Natural gas-fired duct burners installed in Unit 6A heat recovery steam generator downstream of the combustion turbine – built 2003.	385 million Btu/hr	Selective Catalytic Reduction (SCR)	SCR 6A	NO _x	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03
ES-16	EP-14	Natural gas-fired duct burners installed in Unit 6B heat recovery steam generator downstream of the combustion turbine – built 2003.	385 million Btu/hr	Selective Catalytic Reduction (SCR)	SCR 6B	NO _x	State Operating Permit (Ozone Attainment), 9/26/00; Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15); Phase-II Acid Rain Permit, 2/28/03
ES-17	EP-17	Natural gas-fired gas pipeline heater – built 2003	11.85 million Btu/hr	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15)
ES-18	EP-18	Natural gas-fired gas pipeline heater – built 2003	17.37 million Btu/hr	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15)
ES-19	EP-19/22	Horizontally-fired gas auxiliary boiler – built 2003	99 million Btu/hr	None	-	-	Prevention of Significant Deterioration/Non-attainment Permit, 10/05/01 (last amended 3/20/15)
ES-20	EP-20	Commons Waukusa Emergency Diesel Fire Pump (735 hp) – built 1970's		None	-	-	None
ES-21	EP-21	Onan Evergency Diesel Generator (~20 hp) – built 1979		None	-	-	None

ES-22	EP-22	Cummins Starter Engine (300 hp) - built prior to 2002		None	-	-	None
ES-23	EP-23	Cummins Starter Engine (300 hp) - built prior to 2002		None	-	-	None

Process Units							
ES-30	-	Non-halogenated cold solvent degreaser	225 gallons	None	-	VOC	None
ES-31	-	Non-halogenated cold solvent degreaser	25 gallons	None	-	VOC	None
ES-32	-	Non-halogenated cold solvent degreaser	25 gallons	None	-	VOC	None

EMISSIONS INVENTORY

A copy of the 2013 annual emission update is attached. Emissions are summarized in the following tables.

2013 Actual Emissions

Emission Unit	Criteria Pollutant Emissions in Tons/Year					
	VOC	CO	SO ₂	PM ₁₀	PM _{2.5}	NO _x
Unit 3 (ES-3)	0.13	1.07	0.00	1.38	1.38	23.9
Unit 4 (ES-4)	0.33	1.90	0.50	4.77	4.77	78.7
Unit 5 (ES-5)	0.87	6.34	121.70	13.00	5.99	36.60
Unit 6 (ES-6)	0.00	0.00	0.03	0.01	0.01	0.53
Unit 7 (ES-7)	0.00	0.00	0.03	0.00	0.00	0.20
Unit 8 (ES-8)	0.00	0.00	0.03	0.01	0.01	0.53
Unit 9 (ES-9)	0.00	0.00	0.03	0.01	0.01	0.54
Unit 10 (ES-10)	0.00	0.00	0.03	0.01	0.01	0.56
Unit 11 (ES-11)	0.00	0.00	0.03	0.01	0.01	0.54
Unit 6A (ES-13)	2.57	25.00	4.07	94.37	94.37	73.80
Unit 6B (ES-14)	1.82	30.46	4.21	79.02	79.02	71.30
Aux. Boiler (ES-19)	0.28	0.04	0.04	0.51	0.51	2.46
Pipeline Htr – 17.33 MMBtu (ES-18)	0.13	1.91	0.01	0.18	0.18	1.89
Pipeline Htr – 11.85 MMBtu (ES-17)	0.08	1.38	0.01	0.11	0.11	1.25
Total	6.21	68.1	130.72	193.39	186.38	292.8

Source: DEQ's CEDS Database, 2013 Emissions Inventory for Possum Point Power Station.

2013 Facility Hazardous Air Pollutant Emissions

Pollutant*	Hazardous Air Pollutant Emission in Tons/Yr
Hydrochloric Acid (HCl)	0.11

Hydrogen Fluoride (HF)	0.06
Formaldehyde	0.33
Toluene	1.73
Nickel	0.14
Antimony	0.01

Source: DEQ's CEDS Database, 2013 Emissions Inventory for Possum Point Power Station.

*Only pollutants for which emissions exceeded 0.005 tons are listed.

EMISSION UNIT APPLICABLE REQUIREMENTS - UNITS 3 and 4 (ID#'s ES-3 and ES-4)

Limitations

Title V Permit
Condition
Number(s)

Description, rationale, and source of requirement.

- III.A.1 Sets VOC control methods for Reasonably Available Control Technology (RACT) as required by 9 VAC 5-40-300. The condition is from Section E, Paragraph 5, of the 6/5/95 Consent Agreement (CA). That agreement was largely vacated by letter from the DEQ dated 10/31/96, but the VOC portion of the agreement remained in effect. Units 3 and 4 were modified in 2003 under authority of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. Under that permit the modification was approved by U.S. EPA as a "pollution control project" (PCP), therefore, not subject to Lowest Achievable Emission Rate (LAER). The units were still evaluated for Best Available Control Technology (BACT) under state regulations, but the proposed NO_x controls were determined to represent BACT for VOC, so no VOC-specific control measures were included in the permit. Therefore, the VOC requirement of the 6/5/95 CA has not been streamlined out.
- III.A.2 Sets NO_x control methods for BACT as required by 9 VAC 5-50-260. The condition is from Condition 5 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and Condition 5 (for Unit 4 only) of the 7/21/00 State Operating Permit implementing RACT.
- III.A.3 Restricts fuel type to ensure possibility of complying with emission limits of this permit and to meet the requirement of the Consent Decree issued 10/10/03 that requires switching to natural gas by May 1, 2003. Condition is from Condition 18 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit with an addition citing the requirements in Paragraph 97 of the Consent Decree issued 10/10/03 if fuel-switching occurs in the future.
- III. A. 4 & 5 Sets emission limits as follow:
- PM – Particulate matter (PM) here is as defined at 9 VAC 5-10-20, i.e., having aerodynamic diameter less than 100 micrometers. Hourly emission rate limits are set by formula in 9 VAC 5-40-900 B for individual units constructed prior to October 5, 1979. (See 9 VAC 5-40-890 C.) Units 3 and 4 were constructed prior to 1979 and modified in 2003. The permit to modify did not address PM, so by 9 VAC 5-40-10 B, applicable limits under 9 VAC 5, Chapter 40 still apply. The rated capacities, taken from page 3 of the 2002 revised application are 1150 and 2350 million Btu/hr for Units 3 and 4, respectively. With the addition of Unit 5, for which the same application page shows a rated capacity of 8500 million Btu/hr, the "total capacity" (See 9 VAC 5-40-890 C.) of the installation is more than 10 billion Btu/hr, so the applicable emission ratio to be used for 9 VAC 5-40-900 B is found at 9 VAC 5-40-900 A.2.c, i.e., 0.1 pounds of particulate per million Btu's input. It should be noted that since the 2003 modification, these units can burn only gas and no longer have active particulate controls, so the collection equipment efficiency factor used in 9 VAC 5-40-900 B.2 defaults to 1. (See 9 VAC 5-40-920.)

The 0.1 pounds of particulate per million Btu's input emission ratio is technically only a limit for the whole installation (all pre-1979 units combined), but is included as a PM limit in this permit for each unit, because an individual unit cannot comply with 9 VAC 5-40-900 B.2 if its PM to heat input rate exceeds the installation emission ratio.

PM-10 – Condition 23 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment (NA) permit includes an annual PM-10 limit for both units combined commensurate with good combustion practice at continuous year-round operation. That PSD/NA permit limit represents a decrease in PM-10 emissions from the pre-modification emissions, so PM-10 BACT was not required, but an annual limit was necessary in the permit to guarantee that the decrease is real. The PM-10 limit of the PSD/NA permit is the annual PM-10 limit in the Title V permit. There is no short-term PM-10 limit in the PSD/NA permit or in other applicable requirements.

SO₂ – There is no applicable short-term limit specific to these units. 9 VAC 5-40-930 applies to the whole fuel burning equipment installation (all pre-1979 units combined). Therefore, compliance with a short-term SO₂ limit is considered for these units only in conjunction with the other pre-1979 units (Unit 5 and the peaking CT's) and is covered in the section called "All Fuel Significant Fuel Burning Units." These units burn pipeline natural gas only, so their maximum hourly SO₂ emissions are only about 1 and 2 lbs/hr, respectively. Condition 23 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment (NA) Permit includes an annual SO₂ limit for both units combined that is commensurate with good combustion practice at continuous year-round operation. The PSD/NA permit limit represents a decrease in SO₂ emissions, so SO₂ BACT was not required, but an annual limit was necessary in the PSD/NA permit to guarantee that the decrease is real. The SO₂ limit of the PSD/NA permit is the annual SO₂ limit in the Title V permit.

NO_x – The short-term (lbs/MMBtu) NO_x limits are based on RACT limits found at 9 VAC 5-40-311 C. A state operating permit (SOP) was issued on 7/21/00 that states that the RACT limits found at 9 VAC 5-40-311 C, which vary according to fuel type, would apply year-round once the permit was adopted into the federal SIP. The units can now fire only natural gas, so only the RACT limit for natural gas (.20 lbs/MMBtu) applies. The RACT SOP was adopted into the SIP on January 1, 2001, so the RACT limits apply year-round. The 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit did not address short-term NO_x, so the SOP prevails. The PSD/Non-attainment (NA) Permit contains annual NO_x limits for both units combined in order to enforce the decrease in NO_x emissions that exempted those emissions from BACT and LAER. The combined annual PSD/NA permit NO_x limit is streamlined out of the Title V permit in deference to the more stringent combined annual limit found in the Consent Decree issued October 10, 2003 (*United States v. Virginia Electric Power Co., Civ. A. Nos. 03-517 & 03-603-A (E.D. Va.)*). A footnote to these conditions in the Title V permit notes that a more stringent NO_x emission limit (lbs/million Btu) in a later condition applies to the plant as a whole during the period of May through September.

CO – Both the short-term and annual CO emission limits are from Condition 23 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The hourly and annual rate limits were confirmed by dispersion modeling for that permitting action to keep the facility from contributing to a violation of the NAAQS. The heat input-based limits represent BACT.

VOC - Both the short-term and annual VOC emission limits are from Condition 23 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The short-term limit represents BACT. LAER was unnecessary, despite being in an ozone nonattainment area, because the project was approved by U.S. EPA as a “pollution control project” (PCP). The annual limit for the units combined ensures that the emissions offsets obtained are sufficient.

The short-term emission limits in these conditions do not apply during periods of start-up, shutdown, and malfunction. This qualifier is from Condition 23 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. It was approved by U.S. EPA Region-III, so long as emissions during those periods were still subject to the annual limits, which they are.

- III.A.6. Defines start-up and shutdown for Units 3 and 4. It derives from Condition 9 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and the stable minimum load was reported to the DEQ by Dominion letter dated June 12, 2003.
- III.A.7 Sets visible emission opacity limits. It is from Condition 28 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The limits are more stringent than 9 VAC 5-50-80, because only natural gas is fired, so opacity greater than 10% would indicate that good combustion practices were not being followed (possible violation of 9 VAC 5-50-20 E).

Monitoring

- III.B.1 Requires monitoring of SO₂ by a method allowed in 40 CFR 75.11(d) for gas-fired units. Options include continuous emission monitoring system (CEMS) or methods based on fuel monitoring found at 40 CFR Appendix D. The options under 40 CFR 75.11(d) are presumed by the DEQ to comply with 9 VAC 5-50-40, as well as the Monitoring Requirements section of the 2/28/03 Phase-II Acid Rain Permit. Prior to 2003 the units were fired on coal and CEMS were used to satisfy the applicable monitoring requirements. The DEQ was informed by letter dated March 24, 2003, that fuel sampling would replace the CEMS for SO₂ emissions determinations.
- III.B.2. States the requirement for continuous emission monitoring system (CEMS) for NO_x found in Condition 37 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit while satisfying similar requirements of Condition 10 of 7/21/00 State Operating Permit; and Monitoring Requirements section of the 2/28/03 Phase-II Acid Rain Permit.

- III.B.3. States the requirement for continuous emission monitoring system (CEMS) requirement for CO found in Condition 37 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.B.4 Requires CO₂ monitoring by a method provided in 40 CFR 75. It is only for Acid Rain permitting purposes, but is included in this section of the permit so the reader is made aware in one place of all major monitoring requirements covered by this 9 VAC 5 Chapter 80, Article 3 permit.
- III.B.5 Ensures that Part 75 quality control requirements are met for NO_x CEMS. CO is not subject to Part 75, but per the amendments of 7/11/08 to the PSD permit issued 10/05/08 and authority granted at 9 VAC 5-50-40 E.10, some Part 75 quality control requirements that can be applied to CO CEMS are applied in this case, as well as appropriate Part 60 requirements. This condition is based on Condition 39 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.B.6 Requires periodic visual observation, unless a continuous opacity monitor is installed, to check for visible emissions and to follow up, as warranted, with a visible emissions evaluation (VEE) for opacity limit compliance purposes. It is from Condition 37 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. Besides demonstrating compliance with the opacity limit, this condition serves as periodic monitoring for problems that indicate a potential for noncompliance with the emission limit for PM₁₀. If one is required, the VEE must be conducted for at least 12 minutes. The averaging time in Method 9 for opacity is six minutes. However, the permittee is allowed one six-minute period each hour in which the opacity may be between 10 and 20 percent. If only one six-minute evaluation were conducted and it showed an opacity between 10 and 20 percent, the permittee could claim that the evaluated six-minute period represents the six-minute period of greater than 10 percent opacity that is allowed in an hour. At least one more six-minute evaluation would be necessary to show that the remainder of the hour might be no greater than 10 percent. One could argue that at least an hour evaluation should be conducted to prove that the opacity does not exceed 10 percent for more than one six-minute period per hour. However, a one-hour evaluation really doesn't prove that point, because it may be that the particular hour chosen for the evaluation had an unusually low number of six-minute periods of above 10 percent. More hours would have to be evaluated to represent a statistically-significant sample. In the interest of not being unnecessarily burdensome, the DEQ assumes that if the opacity remains at or below 10% for at least six minutes, that it is usually at or below 10%. At the same time, the DEQ recognizes that an occasional spike of higher opacity could occur during a six-minute period being evaluated, without necessarily meaning the unit is out of compliance. This condition has been changed from the most-recently modified version of this permit (issued May 25, 2011), to accommodate the minor amendment issued on June 11, 2013 for the PSD/Non-attainment NSR permit (originally issued October 5, 2001), affecting Condition 48 of that permit.

Recordkeeping

The permit includes requirements (Conditions III.C.1-3) for maintaining records of all monitoring and testing required by the permit. For Units 3 and 4 these records include:

- Monthly and annual fuel throughput
- CEMS calibrations
- Periodic visible emissions checks
- Stack tests, VEE's, and CEMS performance evaluations, as required
- Occurrence of start-up, shutdown, malfunction, and monitors out of service.

Also included is the requirement in Condition III.C.1.b that emissions be calculated monthly in order that the permittee and an inspector can determine periodically that the unit is in compliance with the emission standards.

Testing

- III.D.1 States that the units must be maintained to allow emissions testing. It is a continuation of Condition 49 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, consistent with 9 VAC 5-50-30 F.
- III.D.2 Requires periodic testing of VOC emissions to demonstrate compliance with VOC limits upon which offset requirements are based. The requirement is authorized by 9 VAC 5-50-30 G and is consistent with 9 VAC 5-80-490 E.2.
- III.D.3 A table of test methods has been included in the permit in case other testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

- III.E.1 A quarterly excess emissions report (EER) is required for continuous monitor systems data. The condition is taken from Condition 40 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and 9 VAC 5-50-50 C, but does not refer to 40 CFR 60.7(d) or 13(h), because these units are not subject to an NSPS.
- III.E.2. Stipulates how RACT compliance data must be reported. The condition derives from Condition 10 of 7/21/00 State Operating Permit and does not supplant NOx reporting in EER's or for Acid Rain.

EMISSION UNIT APPLICABLE REQUIREMENTS – Unit 5 (ID# ES-5)

Note: This unit has never been significantly modified and was unaffected by the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Limitations

- III.F.1 Requires continued use of multicyclone or equivalent. Per exception paragraphs 6 and 7 under the definition of modification at 9 VAC 5-80-1110, removal or replacement of control equipment necessary to comply with applicable regulations would be a “modification,” and therefore subject to permitting.
- III.F.2 Sets VOC RACT as required by 9 VAC 5-40-300. The condition is from Section E, Paragraph 5, of the 6/5/95 Consent Agreement (CA). That agreement (attached as Appendix D) was largely vacated by letter (attached as Appendix E) from the DEQ dated 10/31/96, but the VOC portion of the agreement remained in effect.
- III.F.3 Sets NO_x RACT as required by 9 VAC 5-40-310. The condition is from Condition 7 of the 7/21/00 State Operating Permit.
- III.F.4 Limits fuel type to fuel oil. The condition is derived from the first paragraph of the 2/7/73 Permit to Construct & Operate.
- III.F.5 Sets emission limits as follow:
- PM – Particulate matter (PM) here is as defined at 9 VAC 5-10-20, i.e., having aerodynamic diameter less than 100 micrometers. The heat input-based limit is from 40 CFR 60.42(a)(1), applicable new source performance standard. The hourly emission rate limit is set by formula in 9 VAC 5-40-900 B for individual units constructed prior to October 5, 1979. (See 9 VAC 5-40-890 C.) Unit 5 was constructed prior to 1979 and unaffected by the plant modification completed in 2003. Units 3 and 4 were modified in 2003, but the permit to construct and operate did not address PM, so the heat capacities of those units are lumped in with that of Unit 5 when determining the applicable fuel-burning installation capacity under 9 VAC 5-40-900. The rated capacities, taken from page 3 of the 2002 revised application are 1150, 2350, and 8500 million Btu/hr for Units 3, 4 and 5, respectively. The “total capacity” (See 9 VAC 5-40-890 C.) of the installation is more than 10 billion Btu/hr, so the applicable emission ratio to be used for 9 VAC 5-40-900 B is found at 9 VAC 5-40-900 A.2.c, i.e., 0.1 pound of particulate per million Btu’s input. The 0.1 pound of particulate per million Btu’s input emission ratio is technically only a limit for the whole installation (all pre-1979 units combined), but is included as a PM limit in this permit for each unit, because an individual unit cannot comply with 9 VAC 5-40-900 B.2 if its PM to heat input rate exceeds the installation emission ratio.
- SO₂ – The short-term limit is a heat input-based limit from 40 CFR 60.42(a)(1), applicable new source performance standard. There is an applicable hourly emission rate limit at 9 VAC 5-40-930, but under all circumstances it is less stringent than the NSPS, therefore, streamlined from the Title V permit. The only annual standard is in the Acid Rain permit.

NO_x – The short-term NO_x limit averaged over a three-hour period (.30 lbs/MMBtu) is from 40 CFR 60.44(a)(2), applicable new source performance standard. The three-hour averaging period derives from three runs (40 CFR 60.8 (f)) of one hour each (40 CFR 60.46). The short-term NO_x limit averaged over a calendar day (.25 lbs/MMBtu) is based on RACT limits found at 9 VAC 5-40-311 C. A state operating permit (SOP) was issued on 7/21/00 that states that the RACT limits found at 9 VAC 5-40-311 C, which vary according to fuel type, would apply year-round once the permit was adopted into the federal SIP. The unit can fire only oil, so only the RACT limit for tangential firing of oil applies. The RACT SOP was adopted into the SIP on January 1, 2001, so the RACT limit applies year-round. A footnote to this condition in the Title V permit notes that a more stringent NO_x emission limit in a later condition applies to the plant as a whole during the period of May through September.

III.F.6. Sets visible emission opacity limits. Limits are same as at 40 CFR 60.42.

Monitoring/Compliance Assurance Monitoring

- III.G.1 Requires monitoring of SO₂ by a method allowed in 40 CFR 75.11(d) for oil-fired units. Options include continuous emission monitoring system (CEMS) or methods based on fuel monitoring found at 40 CFR Appendix D. The options under 40 CFR 75.11(d) are presumed by the DEQ to comply with 9 VAC 5-50-40, as well as the Monitoring Requirements section of the 2/28/03 Phase-II Acid Rain Permit.
- III.G.2 Requires continuous emission monitoring system (CEMS) for NO_x to satisfy requirements at 9 VAC 5-40-1000 B, Condition 10 of 7/21/00 State Operating Permit, and Monitoring Requirements section of the 2/28/03 Phase-II Acid Rain Permit.
- III.G.3 Requires CO₂ monitoring by a method provided in 40 CFR 75. It is only for Acid Rain permitting purposes, but is included in this section of the permit so the reader is made aware in one place of all major monitoring requirements covered by this 9 VAC 5 Chapter 80, Article 3 permit.
- III.G.4 Requires continuous opacity monitoring. The condition satisfies 9 VAC 5-40-1000 C, 40 CFR 60.45, and 40 CFR 60.75 .14.
- III.G.5-12 These conditions implement the requirements applicable to the Unit 5 boiler (ES-5) for compliance assurance monitoring (CAM), as dictated in 40 CFR Part 64. The Unit 5 boiler is subject to CAM, because it is at a major source required to have a 40 CFR Part 70 permit, it uses a control device (multiclone) to achieve compliance with an emission limit (PM limit), and the pre-control device emissions of the limited pollutant are greater than 100% of the amount that would classify this source as a "major source" (>100 tons/yr). The potential uncontrolled PM at 8760 hr/yr of operation is approximately 3,360 tons/yr. The first indicator for assurance that the multiclone is operating adequately to achieve compliance is an inspection and cleaning program. The device should only malfunction if has obstructions, rough surfaces, or suffers some type of structural failure, which a good inspection and maintenance program should prevent or catch early. The

second indicator is opacity. Opacity is dependent on fuel ash content, quality of combustion, and particle size, as well as the control device removal efficiency, but if the opacity is less than 20%, it can generally be assumed that the control device is functioning as intended.

Recordkeeping

The permit includes requirements (Conditions III.H.1- 4) for maintaining records of all monitoring and testing required by the permit. For Unit 5 these records include:

- Fuel throughput
- Fuel supplier certifications
- CEMS calibrations and operating time, and excess emissions
- Stack tests, VEE's, and CEMS performance evaluations, as required
- Occurrence of start-up, shutdown, malfunction, and monitors out of service.
- Fuel oil data, including sulfur content, for each shipment received

Also included is the requirement in Condition III.H.1 that emissions be calculated monthly in order that the permittee and an inspector can determine periodically that the unit is in compliance with the emission standards.

Testing

- III.I.1 Requires periodic testing of PM emissions to demonstrate compliance with the short-term PM limits of Condition III.F.5.
- III.I.2 A table of test methods has been included in the permit in case other testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

- III.J.1 A quarterly excess emissions report (EER) is required for continuous monitor systems data. The condition derives from 9 VAC 5-50-50, but some language has been modified to make it more consistent with similar conditions in this permit based on Condition 40 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. However one unique feature of this particular condition is that if the CEMS used for determining SO₂ emissions for Acid Rain purposes is not also used to determine compliance with the SO₂ limit in Condition III.F.5, it is not subject to this reporting condition.
- III.J.2. Stipulates how RACT compliance data must be reported. The condition derives from Condition 10 of 7/21/00 State Operating Permit and does not supplant NOx reporting in EER's or for Acid Rain.

Requirements from 40 CFR 63, Subpart UUUUU

- III.K.1-12 The limitations, monitoring, testing, recordkeeping, and reporting requirements of Subpart UUUUU, a.k.a, "the utility MACT," that apply to this unit are consolidated here.

EMISSION UNIT APPLICABLE REQUIREMENTS – Units 6, 7, 8, 9, 10 & 11 (ID#'s ES-6, ES-7, ES-8, ES-9, ES-10 and ES-11)

Note: These units are old, small, simple-cycle, oil-fired combustion turbines used only for “peak” power. Unit 6 here is not the same as the combined cycle system often referred to collectively as “Unit 6.” The latter is composed of Units 6A and 6B (ID#'s ES-13 & ES-14), newer and much larger combustion turbines, and associated heat recovery equipment, duct burners (ID#'s ES-15 & ES-16), and steam turbine. Units 6 – 11 have never been significantly modified and were unaffected by the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Limitations

III.L.1 Sets emission limits as follow:

PM – Particulate matter (PM) here is as defined at 9 VAC 5-10-20, i.e., having aerodynamic diameter less than 100 micrometers. Hourly emission rate limits are set by formula in 9 VAC 5-40-900 B for individual units constructed prior to October 5, 1979. (See 9 VAC 5-40-890 C.) Units 6 - 11 were constructed prior to 1979. The rated capacities for these units from page 3 of the 2002 revised application are 245 million Btu/hr, each; and the rated capacities of Units 3, 4, and 5 are 1150, 2350, and 8500 million Btu/hr, respectively. The “total capacity” (See 9 VAC 5-40-890 C.) of the installation is more than 10 billion Btu/hr, so the applicable emission ratio to be used for 9 VAC 5-40-900 B is found at 9 VAC 5-40-900 A.2.c, i.e., 0.1 pounds of particulate per million Btu’s input. These units do not have particulate controls, so the collection equipment efficiency factor used in 9 VAC 5-40-900 B.2 defaults to 1. (See 9 VAC 5-40-920.) The 0.1 pounds of particulate per million Btu’s input emission ratio is technically only a limit for the whole installation (all pre-1979 units combined), but is included as a PM limit in this permit for each unit, because an individual unit cannot comply with 9 VAC 5-40-900 B.2 if its PM to heat input rate exceeds the installation emission ratio.

SO₂ – There is no applicable short-term limit specific to these units. 9 VAC 5-40-930 applies to the whole fuel burning equipment installation (all pre-1979 units combined). Therefore, compliance with a short-term SO₂ limit is considered for these units only in conjunction with the other pre-1979 units (Unit 5 and the peaking CT’s) and is covered in the section called “All Fuel Significant Fuel Burning Units.” These units are not subject to Acid Rain emissions allocations, nor do any other annual limits apply.

NO_x – There is no applicable limit specific to these units. However, there is a NO_x emission limit in a later condition of this permit that applies to the plant as a whole during the period of May through September. The reader is directed by a note in this condition to see the later condition, so as not to assume that there are no applicable NO_x limits.

III.L.2. Sets visible emission opacity limits. The condition derives from 9 VAC 5-40-940 B. The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A.4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity

standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

Monitoring

- III.M.1. Requires a two minute visual observation of the stack exhaust of each unit that operates 20 or more hours per year and whenever testing units to verify unit operability. Units are to be observed using 40 CFR 60 Appendix A Method 22 at least once during each 200 hours of operation in a year. If any visible emissions are observed, either immediate corrective action must be taken to stop visible emissions or a person certified to use 40 CFR 60 Appendix A Method 9 must conduct at least a six minute visual emissions evaluation (VEE) using Method 9. If the six minute VEE exceeds the 20 percent opacity limit- of III.K.2, but not the 60 percent opacity limit, at least another 18 minutes of VEE must be conducted to determine if another exceedance of 20 percent opacity occurs in a six-minute period in the same hour. The results will be recorded. This condition is for the purpose of periodically demonstrating compliance with the opacity limits of Condition III.L.2. Given that a single six-minute period or even a 24-minute (6 min + 18 min.) period is not a complete hour, this condition does not guarantee compliance during any one VEE, but if violations occur, at least one of them is likely be caught if the units are operated frequently enough for such violations to be of concern. The reason for not doing a full hour or more VEE is simply to avoid being overly burdensome, given the relatively short duration these peaking units operate. These observations, in conjunction with results of VEE's conducted with the PM emissions testing required at Condition III.O.1, are also useful for unofficially determining the likelihood of compliance with the PM emission limits of Condition III.L.1.
- III.M.2 Requires sampling of fuel shipments and states how a shipment is to be defined. It is not from a specific applicable requirement, but is included by applicant request per 9 VAC 5-40-50 E and satisfies 9 VAC 5-80-110 E.

Recordkeeping

The permit includes requirements (Conditions III.N.1 and 2) for maintaining records of all monitoring and testing required by the permit. For Units 6 through 11 these records include:

- Fuel oil data, including sulfur content, for each shipment received
- Visual emissions observations
- Stack tests and VEE's, as required

Testing

- III.O.1 Requires periodic testing of PM emissions to demonstrate compliance with the short-term PM limits of Condition III.L.1. The period between tests, five years, may seem long, but these units are operated infrequently, consequently the cost to benefit ratio would be very high for more frequent testing. In fact, this condition has been modified from the version issued on January 20, 2009, to exempt the units from any emissions testing during the term of the permit if the units do not operate more than 87 hours each, or 522 hours in combination, during any year of the term of the permit. If the 522 combined hours threshold is exceeded, at least two units must be tested; whereas, if only the 87 hours threshold is exceeded, only the unit in excess must be tested. If testing of any unit indicates emissions in excess of 85% of a permit limit, the possibility exists that another might exceed 100% of the limit, so all units must be tested during the term of the permit, regardless of hours of operation. A black start, meaning a start-up of units when no other generating units at the plant are operating due to a failure in the electrical system to which the plant is connected, will not count toward the 87 hour or 522 hour thresholds that trigger testing requirements. This modification to Condition III.O.1 was made: because the permittee applied for some relief from the burden of the condition as originally issued; because DEQ recognizes that the design of these 1960's era combustion turbines makes emissions testing very difficult; and, because it serves as an incentive to minimize the operation of these older units. The applicant asserted during the public comment period (February 14 – March 14, 2007) for the permit as issued on January 20, 2009, that emissions performance testing is not necessary at all. The DEQ does not agree with the assertion, since the amount of emissions is not otherwise known for these units, but DEQ does recognize that the cost-to-benefit ratio of performing such difficult testing is exceedingly high if the units operate less than 87 hours per year. The modification is the result of much discussion between DEQ and the permittee. As mentioned above, there is also a requirement at Condition III.M1.b for visual emissions observations (VEO). The purpose of the VEO is for compliance with opacity requirements, not PM emission limits. However, the DEQ is authorized by 9 VAC 5-40-30 G to require an interim stack test if opacity is a chronic problem, regardless of exemptions in this condition. Furthermore, this condition requires a visible emissions evaluation (VEE) with the PM emissions testing, if required, which will serve to determine compliance with Condition III.L.2 and provide some basis for correlating PM emissions to opacity, but not for purposes of officially determining compliance with emission limits of Condition III.L.1.
- III.O.2 A table of test methods has been included in the permit in case other testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

- III.P.1 Requires annual reporting of operating hours and capacity to provide evidence that the units remain exempt from RACT per 9 VAC 5-40-7430 B.3.a.

- III.P.2 Added as part of the modification to the permit issued January 20, 2009, is this condition that states how test results conducted (if required) for Condition III.O.1 are to be reported.
- III.P.3 Added as part of the modification to the permit issued January 20, 2009, is this condition that requires reporting of the circumstances of the black start operation for which the permittee is claiming exemption from counting hours of operation toward the total that determines if PM testing is required at Condition III.O.1.

EMISSION UNIT APPLICABLE REQUIREMENTS – Units 6A & 6B (ID#’s ES-13 & ES-14)

Note: These units are not the same as Unit 6 (ID# ES-6), which is one of the six old, small, simple-cycle, oil-fired combustion turbines used only for “peak” power. Units 6A and 6B, sometimes referred to jointly as “Unit 6,” are large combined-cycle combustion turbine units, which began operation in 2003 under the 10/05/01 (amended 11/18/02, 12/8/04, 7/11/08, and 5/20/2011) PSD/Non-attainment Permit.

- III.Q.1 Sets NO_x control methods for BACT as required by 9 VAC 5-50-260. The condition is from Condition 3 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.Q.2 & Q.3 Restricts fuel type for the combustion turbines and for the duct burners to ensure possibility of complying with emission limits of this permit, and in the case of the combustion turbines, the fuel sulfur limit at 40 CFR 60.333(b). Conditions are from Conditions 14 and 15 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.Q.4 & Q.5 Restricts fuel throughput for the combustion turbines and for the duct burners to ensure possibility of complying with emission limits of this permit. Conditions are from Conditions 10 and 11 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III. Q.6 Sets limits on stack emissions of PM-10, SO₂, NO_x, CO, VOC, and formaldehyde from the combustion turbines and the duct burners according to which fuel is used and whether the duct burners are on. The duct burners do not operate when the combustion turbines fire oil, so there are no limits given for that situation. The short-term limits are for each unit (6A or 6B) by itself; the annual limits are for the combination of the two. All of the limits are taken from Condition 21 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and were in that permit for the following reasons:
- PM-10 and CO The short-term limits were established as BACT. Both the short-term and annual limits are rates that were modeled to demonstrate compliance with the NAAQS, and in the case of PM-10, the allowable PSD increment.
- SO₂ and NO_x The short-term limits were established as BACT and ensure compliance with NSPS (40 CFR 60 Subpart GG) emission limits. The annual limits derive from the BACT limits and in combination with other limits of that permit ensure that the basis for netting out of PSD remains valid. This part of the condition has been changed from the most-recently modified version of this permit (issued May 25, 2011), to accommodate the minor amendment issued on June 11, 2013 for the PSD/Nonattainment NSR permit (originally issued October 5, 2001), affecting Condition 21 of that permit
- VOC The short-term limits were established as LAER. The annual limit ensures that the obtained offsets are sufficient.
- Formaldehyde The short-term limits were established as BACT and ensure compliance with the significant ambient air concentration (SAAC) found at 9 VAC

5-60-330. Compliance with these limits also ensures compliance with the other "toxics" regulated at 9 VAC 5-60-320, by virtue of formaldehyde having a greater emission rate to SAAC ratio than any other toxic. *(Note: compliance with 9 VAC 5-60-320 and 330 is not federally-enforceable and is mentioned here for informational purposes only.)* The annual limit was set to preclude the project from reaching the threshold of 10 tons per year that would subject it to case-by-case MACT (9 VAC 5-60-170).

- III.Q.7 Defines startup and shutdown for these units for purposes of this Title V permit. The condition refers to time-based definitions in Appendix A (of the permit, not this statement of basis) that depend on the type of start. The condition adds minimum temperature criteria derived by the SCR vendor during the initial break-in period of the SCR to ensure its proper performance and reported to the DEQ in accordance with Condition 53 j. of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit by letter dated July 8, 2003.
- III.Q.8 States that limits on emissions of PM, SO₂, NO_x, and CO from the duct burners are accounted for in only Condition III.Q.6, upon completion (expected to occur by the time this permit is issued) of the Advanced Path Upgrade for which the PSD/Non-attainment permit was amended on 3/20/15. Prior to the upgrade, the duct burners were subject to separate emission limits under 40 CFR Part 60, Subpart Da at §60.46a. That section of Subpart Da is now reserved. After the upgrade, the combustion turbines and their duct burners are subject to 40 CFR Part 60, Subpart KKKK, which includes the duct burner emissions as part of the combustion turbine emission limits and states that they are not subject to Subpart Dc. The condition is derived from Condition 22 of the 10/05/01 PSD/Non-attainment Permit last amended 3/20/15.
- III.Q.9 Defines startup and shutdown for the duct burners for purposes of this Title V permit. The condition is derived from Condition 9 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, which assumes that until the fuel throughput levels off following ignition, the duct burners are still in start-up.
- III.Q.10 Sets visible emission opacity limits. It is from Condition 27 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.Q.11 States that the combustion turbines must comply with the applicable NSPS, the current 40 CFR 60 Subpart GG, except for the requirements listed in the condition. The condition is taken directly from Condition 29 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The bases for the exceptions are determinations for similar cases posted on EPA's Applicability Determination Index Control or by general EPA memoranda. Specific citations are given for each exception.
- III.Q.12 States that the duct burners must comply with the applicable NSPS, the current 40 CFR 60 Subpart Da, except where the permit is more restrictive. It is taken directly from Condition 30 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Monitoring

- III.R.1 States the requirement for continuous emission monitoring system (CEMS) for NO_x and O₂ found in Condition 36 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit while satisfying the requirements of 40 CFR 60.334 and Monitoring Requirements section of the 2/28/03 Phase-II Acid Rain Permit.
- III.R.2 States the requirement for continuous emission monitoring system (CEMS) for CO and O₂ found in Condition 36 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The basis for the requirement is a reliable means of periodic monitoring.
- III.R.3 Requires 40 CFR Part 75 quality control for NO_x CEMS. CO is not subject to Part 75, but per the amendments of 7/11/08 to the PSD permit issued 10/05/08 and authority granted at 9 VAC 5-50-40 E.10, some Part 75 quality control requirements that can be applied to CO CEMS are applied in this case, as well as appropriate Part 60 requirements. This condition is based on Condition 39 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.R.4 Requires periodic visual observation, unless a continuous opacity monitor is installed, to check for visible emissions and to follow up, as warranted, with a visible emissions evaluation (VEE) for opacity limit compliance purposes. It is from Condition 48 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. Besides demonstrating compliance with the opacity limit, this condition serves as periodic monitoring for problems that indicate a potential for noncompliance with the emission limits for PM₁₀. If one is required, the VEE must be conducted for at least 12 minutes. See III.B.6 in this S.O.B. for an explanation of the 12 minute VEE. This condition has been changed from the most-recently modified version of this permit (issued May 25, 2011), to accommodate the minor amendment issued on June 11, 2013 for the PSD/Nonattainment NSR permit (originally issued October 5, 2001), affecting Condition 48 of that permit
- III.R.5. States requirement for being equipped to continuously monitor fuel consumption and water to fuel ratio that is found at 40 CFR 60.4335. The condition is from Condition 7 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The system must be one that has been approved by the DEQ.
- III.R.6 States requirement that the NO_x CEMS shall be used to satisfy the Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. That requirement is at 40 CFR 64.3(b).

Recordkeeping

The permit includes requirements (Conditions III.S.1-3) for maintaining records of all monitoring and testing required by the permit. For Units 6A and 6B these records include:

- Times of operation of the combustion turbines and duct burners
- Hourly and annual throughputs of fuels to both combustion turbines and duct burners
- Fuel supplier certifications
- Fuel sampling results
- Loads each hour on the turbines

CEMS calibrations
Periodic visible emissions checks
Stack tests, VEE's, and CEMS performance evaluations, as required
Occurrence of start-up, shutdown, malfunction, and monitors out of service.

Also included is the requirement in Condition III.S.2.j that emissions be calculated monthly in order that the permittee and an inspector can determine periodically that the unit is in compliance with the emission standards. Conditions III.S.1 and III.S.2.j have been changed from the most-recently modified version of this permit (issued May 25, 2011) when they were Conditions III.R.1 and III.R.2.j,, to accommodate the minor amendments issued on September 30, 2014, and June 11, 2013, respectively, for the PSD/Nonattainment NSR permit (originally issued October 5, 2001), affecting Conditions 19 and 48 of that permit.

Testing

- III.T.1 States that the units must be maintained to allow emissions testing. It is a continuation of Condition 49 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, consistent with 9 VAC 5-50-30 F.
- III.T.2 Requires periodic testing of VOC emissions to demonstrate compliance with VOC limits upon which offset requirements are based and periodic testing of formaldehyde emissions to demonstrate compliance with the formaldehyde limits upon which the exclusion from MACT is based. The condition is from Condition 46 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment. Permit. Formaldehyde testing may be waived if total VOC is less than the formaldehyde short-term limit., This condition was originally set, based on the idea that formaldehyde is a subset of VOC, and cannot have an emission rate greater than VOC. However, the tests (Methods 25 or 25A) stipulated for VOC testing are known to be poor at formaldehyde detection, but the condition remains as originally written, because low results from Methods 25 and 25A are still indicative that VOC production is low, which suggests that formaldehyde formation is also low. (The short-term limit for formaldehyde is approximately a third that for total VOC.)

Reporting

- III.U.1 A quarterly excess emissions report (EER) is required for continuous monitor systems data. Items a through c of the condition are taken from Condition 40 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and 9 VAC 5-50-50 C. Item e makes it clear that, unlike for some of the other excess emission reporting requirements of this permit, excess NO_x emissions during startup, shutdown, and malfunction shall be reported for these units as required at 40 CFR Part 60 Subpart KKKK. Item f states the report format requirement of 40 CFR 60.7(d).

EMISSION UNIT APPLICABLE REQUIREMENTS – Auxiliary Boiler (ID# ES-19)

Limitations

- III.V.1 Sets NO_x control methods for BACT as required by 9 VAC 5-50-260. The condition is from Condition 4 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.V.2 Restricts fuel type to ensure possibility of complying with emission limits of this permit. The condition is from Condition 17 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.V.3. Sets a limit on annual fuel consumption to ensure possibility of complying with emissions limits of this permit. The condition is from Condition 12 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.V.4 Sets limits on stack emissions of PM-10, SO₂, NO_x, CO, and VOC. All of the limits are taken from Condition 24 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and were in that permit for the following reasons:
- PM-10 and CO - The short-term limits were established as BACT. Both the short-term and annual limits are rates that were modeled to demonstrate compliance with the NAAQS, and in the case of PM-10, the allowable PSD increment.
- SO₂ and NO_x -The short-term limits were established as BACT. The annual limits derive from the BACT limits and in combination with other limits of that permit ensure that the basis for netting out of PSD remains valid.
- VOC -The short-term limits were established as LAER. The annual limit ensures that the obtained offsets are sufficient.
- III.V.5 Defines startup and shutdown for the auxiliary boiler for purposes of this Title V permit. The condition is derived from Condition 9 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, which assumes that until the fuel throughput levels off following ignition, the auxiliary boiler is still in start-up.
- III.V.6. Sets visible emission opacity limits. It is from Condition 28 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The limits are more stringent than 9 VAC 5-50-80, because only natural gas is fired, so opacity greater than 10% would indicate that good combustion practices were not being followed (possible violation of 9 VAC 5-50-20 E).
- III.V.7 Requires compliance with applicable NSPS 40 CFR 60 Part Dc. It is from Condition 30 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Monitoring

- III.W.1 Requires periodic visual observation, unless a continuous opacity monitor is installed, to check for visible emissions and to follow up, as warranted, with a visible emissions evaluation (VEE) for opacity limit compliance purposes. It is from Condition 48 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment

Permit. If required, the VEE must be conducted for at least 12 minutes. See III.B.6 in this S.O.B. for an explanation of the 12 minute VEE. Besides demonstrating compliance with the opacity limit, this condition serves as periodic monitoring for problems that indicate a potential for noncompliance with the emission limits for PM₁₀ and VOC. This condition has been changed from the most-recently modified version of this permit (issued May 25, 2011), to accommodate the minor amendment issued on June 11, 2013 for the PSD/Nonattainment NSR permit (originally issued October 5, 2001), affecting Condition 48 of that permit.

Recordkeeping

The permit includes requirements (Condition III.W.1) for maintaining records of all monitoring and testing required by the permit. For the auxiliary boiler these records include:

- Fuel throughput
- Records to comply with 40 CFR 60 Subpart Dc
- Periodic visible emissions checks
- Stack tests and VEE's, as required

Also included is the requirement in Condition III.W.1 that emissions be calculated monthly in order that the permittee and an inspector can determine periodically that the unit is in compliance with the emission standards.

Testing

- III.Y.1 States that the boiler must be maintained to allow emissions testing. It is a continuation of Condition 49 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, consistent with 9 VAC 5-50-30 F.
- III.Y.2 Requires periodic testing of NO_x and CO emissions to demonstrate compliance with emission limits upon which offset requirements are based. The requirement is authorized by 9 VAC 5-50-30 G and is consistent with 9 VAC 5-80-490 E.2.
- III.Y.3 A table of test methods has been included in the permit in case other testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

There are no currently applicable reporting requirements other than under the applicable MACT at 40 CFR 63 DDDDD, which are provided in the permit section covering all requirements of that MACT. Initial reporting requirements under that MACT (40 CFR 63 DDDDD) and the applicable NSPS (40 CFR 60 Dc) have already been met.

Applicable MACT (40 CFR 63 DDDDD) Requirements

The auxiliary boiler (ID# ES-19) is subject to requirements of 40 CFR 63 DDDDD. Applicable requirements of that subpart are listed in the permit at Section III.BB. Applicable Requirements from 40 CFR 63, Subpart DDDDD.

EMISSION UNIT APPLICABLE REQUIREMENTS – Nat. Gas Pipeline Heaters (ID# ES-17 & ES-18)

Limitations

- III.BB.1 Restricts fuel type to ensure possibility of complying with the short term emission limits of this permit. Condition is from Condition 16 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.BB.2 Restricts fuel throughput to ensure possibility of complying with the annual emission limits of this permit. Condition is from Condition 13 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.
- III.BB.3 & 4 Sets limits on stack emissions of NO_x and CO. The limits are taken from Conditions 25 and 26 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit and were in that permit for the following reasons:
- CO - The short-term limits were established as BACT. Both the short-term and annual limits are rates that were modeled to demonstrate compliance with the NAAQS, and in the case of PM-10, the allowable PSD increment.
- NO_x - The short-term limits were established as BACT. The annual limits derive from the BACT limits and in combination with other limits of that permit ensure that the basis for netting out of PSD remains valid.
- III.BB.5 Defines startup and shutdown for the pipeline heaters for purposes of this Title V permit. The condition is derived from Condition 9 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, which assumes that until the fuel throughput levels off following ignition, the pipeline heaters are still in start-up.
- III.BB.6. Sets visible emission opacity limits. It is from Condition 28 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The limits are more stringent than 9 VAC 5-50-80, because only natural gas is fired, so opacity greater than 10% would indicate that good combustion practices were not being followed (possible violation of 9 VAC 5-50-20 E).
- III.BB.7 Requires compliance with applicable NSPS 40 CFR 60 Part Dc. It is from Condition 31 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Monitoring

- III.CC.1 Requires periodic visual observation, unless a continuous opacity monitor is installed, to check for visible emissions and to follow up, as warranted, with a visible emissions evaluation (VEE) for opacity limit compliance purposes. It is from Condition 48 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. If required, the VEE must be conducted for at least 12 minutes. See III.B.6 in this S.O.B. for an explanation of the 12 minute VEE. This condition has been changed from the most-recently modified version of this permit (issued May

25, 2011), to accommodate the minor amendment issued on June 11, 2013 for the PSD/Non-attainment NSR permit (originally issued October 5, 2001), affecting Condition 48 of that permit.

Recordkeeping

The permit includes requirements (Conditions III.DD.1) for maintaining records of all monitoring and testing required by the permit. For the natural gas pipeline heaters these records include:

- Fuel throughput
- Records to comply with 40 CFR 60 Subpart Dc
- Periodic visible emissions checks
- Stack tests and VEE's, as required

Also included is the requirement in Condition III.DD.1 that emissions be calculated monthly in order that the permittee and an inspector can determine periodically that the unit is in compliance with the emission standards.

Testing

III.EE.1 States that test ports must be installed if and when requested. It is from Condition 49 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, consistent with 9 VAC 5-50-30 F.

III.EE.2A table of test methods has been included in the permit in case other testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

There are currently no applicable reporting requirements other than those in the MACT at 40 CFR 63 DDDDD, which are provided in a separate permit section that covers all types of applicable requirements of that MACT. Initial reporting requirements under that MACT (40 CFR 63 DDDDD) and the applicable NSPS (40 CFR 60 Dc) have already been met.

Applicable MACT (40 CFR 63 DDDDD) Requirements

The auxiliary boiler (ID# ES-19) is subject to requirements of 40 CFR 63 DDDDD. Applicable requirements of that subpart are listed in the permit at Section III.BB. Applicable Requirements from 40 CFR 63, Subpart DDDDD.

**EMISSION UNIT APPLICABLE REQUIREMENTS – All Significant Fuel Burning Units
(Combinations of ID#'s ES-3, ES-4, ES-5, ES-6, ES-7, ES-8, ES-9, ES-11, ES-13, ES-14, ES-15, ES-16, ES-17, ES-18 and ES-19)**

Limitations

- III.HH.1 States a pounds-per-hour sulfur dioxide emission limit for the “fuel burning equipment installation,” defined at 9 VAC 5-40-890 as all fuel burning equipment in operation prior to October 5, 1979. At Possum Point that is the Units 3, 4, and 5 boilers and the small oil-fired combustion turbines, Units 6 through 11. The limit was determined by the formula at 9 VAC 5-40-930 C (for installations with different fuels fired simultaneously). No solid fuels are fired, so the Y variable equals zero and the formula reduces to the same as in 9 VAC 5-40-930 A.2. The DEQ has determined that in the extremely unlikely case of all of the significant fuel burning units operating at 145 percent of design capacity the whole facility will be in compliance with the limit of this condition, so long as Unit #5 is in compliance with its pounds of SO₂ per million Btu's limit found at Condition III.F.2. Therefore, compliance may be demonstrated by maintaining compliance with the Unit #5 SO₂ limit and keeping on site a mathematics-based analysis that supports the DEQ determination of compliance with this condition at 145 percent of design capacity operation.
- III.HH.2 Limits the total emissions of NO_x from the major electric power producing units (3,4,5, and 6A & 6B) during the ozone season. The condition is derived from a letter addressed to Ms. Pamela F. Faggert, Vice President & Chief Environmental Officer, Dominion Generation and signed by John M. Daniel, Jr., Director, Air Division, dated February 20, 2003, and attached to this document as Appendix B. The letter was issued under authority of Section 110 of the Clean Air Act. This condition cannot be satisfied by obtaining emissions reduction credits from outside the Washington, DC nonattainment area.
- III.HH.3 Limits the average pounds of NO_x per million Btu's of fuel heat input for the entire plant during the ozone season. The condition is from a combination of Conditions 3 and 8 of the 9/26/00 State Operating Permit (Ozone Attainment). The condition allows compliance by either limiting emissions at the plant or by securing sufficient emission reduction credits through a federally-enforceable emissions trading program or a combination of the two. However, the DEQ may amend the State Operating Permit to exclude or limit the trading program option and, if so, the amendments will be considered a part of this permit.
- III.HH.4 Places responsibility on permittee to ensure that VOC offsets secured as a requirement under Condition 50 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit remain permanently in place. The responsibility to ensure permanence is from that same Condition 50.

Recordkeeping

- III.II.1 Requires maintenance of records for demonstrating compliance with the SO₂ limits of Condition III.HH.1. These records satisfy 9 VAC 5-40-50 F.

- III.II.2 Requires retention of records for 5 years, as required for NO_x by Condition 7 of the 9/26/00 State Operating Permit (Ozone Attainment) and in general by 9 VAC 5-80-490 F.
- III.II.3 Requires maintaining on site a copy of the Maryland-issued document that shows there are permanent offsets in place for VOC emission increases permitted for the plant by the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. The condition derives from Conditions 51 and 52 of that permit. Note: the emission reduction credits used as offsets were certified in a August 31, 2001 letter from Maryland Department of the Environment (MDE). U.S. EPA concurred with MDE in their letter dated August 31, 2001.

Reporting

- III.JJ.1 States reporting requirements for demonstrating compliance with the letter issued by John Daniel of the DEQ on February 20, 2003 and the conditions of the 9/26/00 State Operating Permit (Ozone Attainment). This condition satisfies Condition 5 of that permit, which not only requires an annual, post-ozone season report, but states that the DEQ will prescribe the details of monitoring, recordkeeping, and reporting, and include them in the Title V permit. Those details were never prescribed, so they are prescribed in this permit. The condition requires that the format and method of reporting be acceptable to the NRO Air Compliance Manager. At the time this permit was written, the regional office was encouraging reporting by electronic media to reduce paper use, so this possibility is mentioned in the condition.
- III.JJ.2 Requires notification to the DEQ in the event of a forced outage of a unit for which operation is essential in order for the permittee to comply with the plant-wide NO_x emission limit of Condition III.HH.3. The condition is from Condition 3 of the 9/26/00 State Operating Permit (Ozone Attainment).
- III.JJ.3 No specific monitoring or reporting by the permittee is required for maintaining the offset credits, but this condition authorized by 9 VAC 5-80-490 G requires the permittee to report that any offsets deficiencies discovered by the DEQ have been corrected.

EMISSION UNIT APPLICABLE REQUIREMENTS – Permanently Shutdown Fuel Burning Equipment

- III.KK.1 Declares that reactivation of the shut down Units 1 and 2 boilers, which are not included as significant units in this permit, and therefore, have no emission unit ID numbers, would be subject to new source review permitting under Chapters 50 and 80. The condition is from Condition 8 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit).

EMISSION UNIT APPLICABLE REQUIREMENTS – Engines (ID#'s ES-21, ES-22, and ES-23)

Three of the four listed stationary engines (ID#'s ES-21, ES-22, and ES-23), as existing stationary reciprocating internal combustion engines (RICE) at a major source of hazardous air pollutants (HAP), are subject to 40 CFR Part 63, Subpart ZZZZ. As an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate for the purposes specified in §63.6640(f)(2)(ii) and (iii), the fire pump engine (ID# ES-20) is not subject to Subpart ZZZZ, per §63.6590(b)(3)(iii). None of the four listed engines are subject to other federally-enforceable requirements, including conditions of any DEQ-issued permit, so all conditions of this federal operating permit for the engines ID#'s ES-21, ES-22, and ES-23, are for complying with applicable requirements of 40 CFR Part 63, Subpart ZZZZ.

Limitations

- III.LL.1-4 States the applicable operational limitations of 40 CFR Part 63, Subpart ZZZZ found at Table 2c.1, which in this case are inspection and maintenance requirements. There are no applicable emission limits.

Monitoring

- III.MM Cites the sections of 40 CFR Part 63, Subpart ZZZZ, where the applicable monitoring requirements are found.

Recordkeeping

- III.NN Cites the sections of 40 CFR Part 63, Subpart ZZZZ, where the applicable recordkeeping requirements are found.

Reporting

- III. OO Cites the sections of 40 CFR Part 63, Subpart ZZZZ, where the applicable reporting requirements are found.

EMISSION UNIT APPLICABLE REQUIREMENTS – Above Ground Storage Tank (ID# ES-26)

Limitations

- IV.A. 1. Limits stored fuel type to type that is already permitted and ensures it would not become subject to 40 CFR 60, Subpart Kb. It is from Condition 20 of the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit.

Monitoring and Recordkeeping

- IV.B.1. Requires records to demonstrate compliance with the limitation on fuel type stored. This condition satisfies 9 VAC 5-80-490 E.2.

EMISSION UNIT APPLICABLE REQUIREMENTS – Solvent Cleaning Operations (ID#'s ES-30, ES-31, and ES-32)

Limitations

- IV.D.1 & 2 Provide the applicable requirements found in the SAPCB existing source rule for solvent metal cleaning operations (9VAC5, Chapter 40, Article 47) that govern operation and work practices

Monitoring

There are no applicable monitoring requirements.

Recordkeeping

The permit includes requirements (Condition IV.D.1.) for maintaining records to demonstrate compliance with the applicable cleaning solvent requirements in 9 VAC 5, Chapter 40, Article 47. For the solvent cleaning operations these records include:

The name and address of the solvent supplier
The solvent type and ID number
The solvent vapor pressure at 20 °C.

Reporting

There are no applicable reporting requirements. The applicable limitations other than for the solvents can be determined by inspection.

FACILITY WIDE APPLICABLE REQUIREMENTS

Limitations

- V.A.1. Requires careful handling of VOC-containing substances to minimize fugitive VOC emissions. The condition is from Condition 6 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit. Although the PSD/Non-attainment permit was not written to include the entire plant, VOC-containing substances used for or around equipment that was included in the permit may find its way to other parts of the plant; therefore, this condition is presumed to apply everywhere at the plant.

Exceptions

- V.B.1. States the approvals necessary before applicable requirements that existed prior to the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit being issued can be considered no longer applicable on the basis of being less stringent or equivalent to conditions of that permit or alternate measures proposed as equivalent. "Streamlining" through the Title V process has accomplished much the same thing, but the condition is in the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit (as Condition 6) and may still be applied, though this Title V permit would also require amending.
- V.B.2. States the types of units exempted from RACT requirements. It is from Condition 11 of the 7/21/00 State Operating Permit (NO_xRACT).

Recordkeeping

- V.C.1. Requires records as necessary to support claims of RACT-exempt status. The condition is from Condition 14 of the 7/21/00 State Operating Permit (NO_xRACT).

Relationship of Consent Decree

- V.D.1 Explains that the consent decree entered by the United States District Court for the Eastern District of Virginia, Civil Action Nos. 03-CV-517-A and 03-CV-603-A, on October 10, 2003 between Virginia Electric Power Company and the United States of America, et al. (referred to for purposes of this permit as the "Consent Decree"), for all provisions affecting the operation or permitting of the Possum Point Power Station, is to be considered an enforceable part of this permit. This condition is appropriate because the Consent Decree is a federally-enforceable document and its inclusion is with the concurrence of the U.S. EPA by e-mails from Sharon McCauley, Permits and Technical Assessment Branch, Air Division, to John McKie, DEQ, dated July 18, 2007, and December 23, 2008. In response to EPA specifically requesting that Consent Decree Paragraph 136 or it's "netting limits" provisions be included in this Title V permit, this permit condition specifically names (but does not limit to) that paragraph as one that must be complied with in the permitting process when relevant. The condition also states that where there may be a conflict between the Consent Decree and other text of this permit, the more stringent requirements shall prevail. Much of the text of this condition was provided by the applicant with additions made by DEQ as deemed necessary by DEQ and the U.S. EPA.

Streamlined Requirements

The following (summarized) conditions in the 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit have not been included for the reasons provided in italics:

Condition 1. - The facility is to be modified and operated as represented in the permit application dated July 13, 2000, including amendment information dated: October 25, 2000; March 1, 2001; May 31, 2001; June 11, 2001; July 17, 2001; August 14, 2001; August 16, 2001; August 17, 2001; August 20, 2001; and July 12, 2002; and if further modified, may require more permitting. *The modifications have already been made in accordance with the permit. Operational limitations and the necessity of getting a permit if further modified are covered by other conditions of the Title V permit, including the General Conditions.*

Condition 8. – Requires certification to the DEQ that Units 1 and 2 have been shut down. *This was already done by letter from M.G. Deacon to Charles Forbes, dated March 10, 2003.*

Condition 9. – Provides definition of start-up and shutdown, partially based on criteria to be determined. *The criteria have already been determined and are included in the Title V permit under various conditions.*

Condition 33. – States that other applicable permits are not superseded. *Inclusion into the Title V permit of requirements from the other permits make this condition unnecessary.*

Condition 38. - Requires CEMS evaluations. *These evaluations were completed in 2003.*

Conditions 41. through 45. – Require initial emissions compliance (stack) tests. *These tests were completed in 2003.*

Condition 49. – Requires testing ports to be put on the flues or stacks from Units 3, 4, 6A, 6B, the auxiliary boilers, and the pipeline heaters. *This was done when the units were constructed. Unit-specific conditions in the Title V permit require that the ports are maintained.*

Condition 53. – Lists initial notification requirements. *The notifications have been completed.*

Condition 54. – Requires construction to begin within 18 months of permit issuance and to maintain continuous construction. *The modifications were made within the allotted time frame, except for one auxiliary boiler and two pipeline heater, which were deemed no longer necessary.* Conditions 7, 21, 22, 29, and 48 – Portions of these conditions have not been included, because they depend on the applicability of 40 CFR 60, Subpart GG, to Units 6A and 6B. However, those units are being modified as of the writing of this statement of basis. Therefore, they become subject to Subpart KKKK in lieu of Subpart GG. The two subparts are mutually exclusive. The consequence is that portions of the aforementioned conditions are streamlined out, because they are no longer applicable. Of particular importance is that the separate emission limits that were applied to the duct burners in Condition 22 are no longer applicable. They were from Subpart Da, which Subpart KKKK excludes as applicable to duct burners used with combustion turbine heat recovery systems, as in this case.

The following (summarized) conditions in the 7/21/00 State Operating Permit have not been included for the reasons provided in italics:

Condition 1. – States that the permit does not supersede other applicable permits and regulatory

requirements. *Inclusions into the Title V permit of requirements from the other permits make this condition unnecessary.*

Conditions 4., 6., 8. & 9. – Describe RACT limitations that apply prior to the state operating permit being included by EPA into the State Implementation Plan (SIP). *The permit was included into the SIP on January 1, 2001.*

All conditions of the June 12, 1995, Consent Agreement, except those pertaining to VOC RACT, were vacated by letter to A.W. Hadder, Virginia Power, from Alice G. Nelson, DEQ, dated October 31, 1996. NO_x RACT requirements are stated in the 7/21/00 State Operating Permit.

The following (summarized) conditions in the 9/26/00 State Operating Permit have not been included for the reasons provided in italics:

Condition 1. – States that the permit does not supersede other applicable permits and regulatory requirements. *Inclusions into the Title V permit of requirements from the other permits make this condition unnecessary.*

Condition 4. – States that compliance must begin in 2003. *Inasmuch as 2003 is in the past, the Title V permit is written so that compliance is expected now and hereafter.*

No conditions from the 9/18/98 Permit to Construct and Operate a Replacement Coal Crusher have been included, because the equipment covered by that permit was removed and declared permanently shut down by a letter of mutual determination, pursuant to 9 VAC 5-80-1210 K and 9 VAC 5-20-220, counter-signed by the Director of the DEQ Northern Regional Office on September 18, 2012. As a consequence, that permit is no longer valid.

The following (summarized) conditions in the 02/07/73 Permit to Construct and Operate an 8050 million Btu/hour oil-fired boiler have not been included for the reasons provided in italics:

Condition 1. – Requires quarterly construction status reports. *The requirement has been completed.*

Condition 2. – Requires notification of the state agency prior to initial emissions performance testing. *The requirement has been completed.*

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-490 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §§2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-2003".

This general condition cite(s) the Article(s) that follow(s):

Article 3 (9 VAC 5-80-360 et seq.), Part II of 9 VAC 5 Chapter 80. Acid Rain Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-430. Application

9 VAC 5-80-500. Permit Shield

9 VAC 5-80-510. Action on Permit Applications

9 VAC 5-80-490 D. states that the permit shall set an expiration date "reflecting a fixed term of five years." As issued initially on January 20, 2009, this permit had an expiration date that extended beyond the five-year term of the Title IV Acid Rain permit that was attached as a separate document. In order to make concurrent the terms of the Title IV and Title V permits, so that adherence to 9 VAC 5-80-490 D would not result in a continued conflict with the Title IV permit issuance and expiration dates or with the Department's Title V Permit Manual, which states that for renewals the effective/issuance date and expiration dates will be the same for the combined/renewed permits, the initial term of this combined permit has been shortened to four years as part of the second modification to the permit issued January 20, 2009. The term length and effective/issuance and expiration dates are also presented on the signature page of the permit.

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-650 of the Acid Rain Operating Permit regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Acid Rain Operating Permit facilities. Section 9 VAC 5-80-650 is from the Acid Rain Operating Permit regulations. Acid Rain Operating Permit facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-650. The report must be made within four daytime business hours of discovery of the malfunction.

In order for emission units to be relieved from the requirement to make a written report in 14

days the emission units must have continuous monitors meeting the requirements of 9 VAC 5-50-410 or 9 VAC 5-40-41.

[This general condition cites the sections that follow:

[9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting]

[This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.]

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-360. Applicability, Acid Rain Operating Permit For Stationary Sources
9 VAC 5-80-550. Changes to Permits.
9 VAC 5-80-660. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications
Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications
Locating in Nonattainment Areas]

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-490. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

[This general condition cites the regulatory sections that follow:
9 VAC 5-60-70. Designated Emissions Standards
9 VAC 5-80-490. Permit Content]

CC. Temporary Suspension of Enforcement

Added as part of the first modification to the permit issued January 20, 2009, is this condition that is a word-for-word restatement of the statutory language from the Virginia Air Pollution Control Law that allows the permittee to request the DEQ Executive to suspend enforcement of regulations or permit conditions that pertain to equipment and operations affected by a *force majeure* event. Such a situation is described at the modified Condition III.N.1 for black start operation; therefore, inclusion of this condition as requested by the permittee was deemed by DEQ to be appropriate.

CROSS-STATE AIR POLLUTION RULE (CSAPR) REQUIREMENTS

The U.S. EPA promulgated the Cross-State Air Pollution Rule (CSAPR) on August 8, 2011 and subsequently revised it multiple times. This rule, also referred to as the "Transport Rule" throughout the Code of Federal Regulations (CFR), comprises multiple trading programs to address interstate transport of emissions. The Possum Point Power Station is subject to three programs covered by the rule: the TR NO_x annual Trading Program, per §97.404; the TR NO_x Ozone Season Trading Program, per §97.504, and the TR SO₂ Group 1 Trading Program, per §97.604. A general statement of the applicability of the requirements found at 40 CFR Part 97 to the Possum Point Power Station has been included as Section X of the permit.

STATE ONLY APPLICABLE REQUIREMENTS

The following specific requirements are only enforceable by the State and have been identified as applicable by the applicant:

Condition 67 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, emission limits of four toxic pollutants. The condition is found in the "State Only Enforceable Requirements Section of that otherwise federally-enforceable permit. Virginia Administrative Code citations given for the condition are 9 VAC 5-50-160 and 9 VAC 5-50-180, which have been repealed and replaced by 9 VAC 5-60-300 and 9 VAC 5-60-320.

Condition 68 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, compliance with Condition 67 above. Virginia Administrative Code citation given for that condition is 9 VAC 5-50-220, which has been repealed and replaced by 9 VAC 5-60-360.

Condition 69 of 10/05/01 (last amended 3/20/15) PSD/Non-attainment Permit, reporting compliance with Condition 67 above. Virginia Administrative Code citation given for that condition is 9 VAC 5-50-50, which is normally federally-enforceable, but in this case is used to report results for compliance purposes of the state-only enforceable 9 VAC 5-60-360, so would not be considered federally-enforceable.

FUTURE APPLICABLE REQUIREMENTS

40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters) (Boiler MACT) applies to the natural gas pipeline heaters (ES-17 and ES-18) and the auxiliary boiler (ES-19) as boilers or process heaters at a major source of Hazardous Air Pollutants (HAP) in the "units designed to burn gas 1 fuels" subcategory. Those units must come into compliance with the applicable requirements of this subpart no later than January 31, 2016, per §63.7495 (b).

INAPPLICABLE REQUIREMENTS

New Source Performance Standards (NSPS) in 40 CFR Part 60 Subparts Ka and Kb for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) are not currently applicable to the fuel storage tanks. Subpart Kb has been revised to exempt all tanks containing liquids of vapor pressure less than 3.5 kPa, which the 2 million gallon tank constructed in 2003 does. The other large storage tanks (ID#'s 27, 28, and 29) are exempt from Subparts Ka and Kb, because the tanks were constructed prior to May 18, 1978.

Having been constructed before February 18, 2005, the Units 6A and 6B combustion turbines were subject to NSPS at 40 CFR 60 Subpart GG for Stationary Combustion Turbines. However, because these units were modified after February 18, 2005, as a project authorized by the minor NSR permit action and concurrent PSD/Nonattainment permit minor amendment issued March 20, 2015, they are now subject to the NSPS at Subpart KKKK for Stationary Combustion Turbines. That subpart states at §60.4305(b) that subject combustion turbines are exempt from requirements of Subpart GG and that subject heat recovery steam generators and duct burners are exempt from the requirements of Subparts Da, Db, and Dc. These units are not subject to MACT "requirements" at 40 CFR 63 Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, and not to Subpart A, according to 63.6090(b)(4), because they were constructed before January 14, 2003.

The auxiliary boiler (ES-19) and the natural gas pipeline heaters (ES-17 and ES-18) are subject to 40 CFR 63 Subpart DDDDD, but according to §63.7495 (b) these units, as existing (commenced construction prior to January 14, 2008) units, do not need to come into compliance before January 31, 2016; and according to §63.7500, as boilers or process heaters in the "units designed to burn gas 1 fuels subcategory" are not subject to emission limits or operating limits in the tables to this subpart.

The fire pump diesel engine (ES-20) does not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). §63.6590(b)(3)(iii) states that an existing emergency stationary RICE (which according to the definition at §63.6675 includes a "RICE used to pump water in the case of fire") with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) does not have to meet the requirements of this subpart. A fire pump engine does not operate at all for those purposes, which apply only to electrical generators.

The Chemical Accident Prevention Provisions at 40 CFR Part 68 do not apply to the ammonia tanks for the SCR control on Units 6A and 6B, because the ammonia is in aqueous solution at a concentration of less than 20%, which is specifically exempted by 40 CFR Part 68 §130 (b).

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

Unit #5 at Possum Point Power Station was subject to BART requirements based on its age and potential emissions of visibility-impairing pollutants (PM₁₀, NO_x, and SO₂). USEPA determined that, as a whole, the CAIR cap-and-trade program improved visibility more than implementing BART for individual sources in states affected by CAIR. States that opted to participate in the CAIR program were not mandated to require affected BART-eligible EGUs to install, operate, and maintain BART for SO₂ and NO_x emissions. VDEQ participated in CAIR and accepted USEPA's overall finding that CAIR substituted for BART for NO_x and SO₂. As a result of a Supreme Court ruling, the CAIR program was terminated and is replaced (effective January 1, 2015) by a program to implement the Cross-State Air Pollution Rule (CSPAR). Presumably, it would substitute for BART for NO_x and SO₂ in the same way that CAIR was said to do.

Also under the BART guidelines, VDEQ exempted sources from BART if that source did not cause or contribute to visibility impairment in a Class I area. In accordance with the guidelines, VDEQ used a contribution threshold of 0.5 deciview (dv) to determine which sources were subject to BART. Dominion submitted an evaluation of Boiler #5's PM₁₀ emissions on visibility in nearby Class I areas. This evaluation demonstrated that the maximum visibility impact to any nearby Class I area was less than 0.5 dv. VDEQ proposed to exempt this unit from further BART requirements in appropriate newspapers during the week of January 19, 2007. No adverse comments were received, and correspondence dated June 8, 2007, from the National Park Service concurred with these exemptions. BART analyses and modeling as well as detailed information on the regional haze long term strategy may be found in Chapter 7 and Appendix H of Virginia's regional haze SIP revision, which was submitted to EPA in final form on October 4, 2010.

INSIGNIFICANT EMISSION UNITS

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

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation (see footnotes)	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IS-4	Lube Oil Systems/Waste Oil Systems/Hydraulic Oil Systems	Emission Level ^{††}	VOC	NA
IS-8	Gasoline Tank	Emission Level ^{††}	VOC	3,000 gallons
IS-9	Kerosene Tank	Emission Level ^{††}	VOC	2,000 gallons
IS-10	Combustion Turbine No.3 & No. 4 Blackstart Diesel Generator Fuel Tank	Size/capacity ^{†††}	VOC	110 gallons
IS-12	Oily Waste Pond	Emission Level ^{††}	VOC	450,000 gallons
IS-13	Flyash Handling System	Emission Level ^{††}	PM ₁₀	NA
IS-14	Ash Storage Ponds	Emission Level ^{††}	PM ₁₀	NA
IS-15	Fuel Additive System	Emission Level ^{††}	VOC	NA
IS-16	No.2 Fuel Oil Truck Unloading/Loading Station	Emission Level ^{††}	VOC	NA
IS-21	Cooling System (Unit 6)	Emission Level ^{††}	PM ₁₀	178,000 gallons/min
IS-22	Cooling System (Unit 5)	Emission Level ^{††}	PM ₁₀	~130,000 gallons/min
IS-23	Vehicle Diesel Fuel Tank	Emission Level ^{††}	VOC	5,000 gallons
IS-24	Emergency Diesel Firepump Tank	Emission Level ^{††}	VOC	1,000 gallons

[†] 9 VAC 5-80-720 A. - Listed Insignificant Activity, Not Included in Permit Application

^{††} 9 VAC 5-80-720 B. - Insignificant due to emission levels

^{†††} 9 VAC 5-80-720 C. - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

FOR THE PERMIT ISSUED June 12, 2015.

The draft permit was placed on public notice in the *Washington Times* newspaper on April 24, 2015 for public comment from April 24, 2015 to May 26, 2015.

Summary of Comments and Responses

No comments were received during the advertised public comment period.

APPENDIX A – 2013 Annual Emissions Report from DEQ's CEDS Database

Commonwealth of Virginia
Department of Environmental Quality

Run Date 12/12/2014 10:16:24 AM

Page 1 of 4

Registration Number : 70225

County - Plant Id: 153-00002

Plant Name : Dominion - Possum Point Power Station

POLLUTANT EMISSIONS REPORT (STACK/POINT) (TONS/YEAR)

Parameter List

Pollutant Type: Criteria Pollutants

Years: 2013 - 2013

Inventory Year 2013

Stack #: 3

Point #: 3	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 2	1.070	0.560	23.900	0.000	1.380	1.380	0.000	0.128
	1.070	0.560	23.900	0.000	1.380	1.380	0.000	0.128

Stack #: 4

Point #: 4	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 2	1.900	1.929	78.700	0.000	4.770	4.770	0.500	0.326
	1.900	1.929	78.700	0.000	4.770	4.770	0.500	0.326

Stack #: 5

Point #: 5	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	5.508	0.881	32.560	0.005	12.744	5.970	108.250	0.837
Segment #: 2	0.831	0.133	4.040	0.000	0.258	0.019	13.450	0.033
	6.338	1.014	36.600	0.005	13.002	5.989	121.700	0.870

Stack #: 6

Point #: 6	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.002	0.529	0.000	0.007	0.007	0.030	0.000
	0.002	0.529	0.000	0.007	0.007	0.030	0.000

Point #: 7	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.001	0.199	0.000	0.003	0.003	0.011	0.000
	0.001	0.199	0.000	0.003	0.003	0.011	0.000

Commonwealth of Virginia
Department of Environmental Quality

Run Date 12/12/2014 10:16:24 AM

Page 2 of 4

Registration Number : 70225

County - Plant Id: 153-00002

Plant Name : Dominion - Possum Point Power Station

POLLUTANT EMISSIONS REPORT (STACK/POINT) (TONS/YEAR)

Parameter List

Pollutant Type: Criteria Pollutants

Years: 2013 - 2013

Inventory Year 2013

Stack #: 6

Point #: 8	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.002	0.532	0.000	0.007	0.007	0.031	0.000
	0.002	0.532	0.000	0.007	0.007	0.031	0.000
Point #: 9	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.002	0.540	0.000	0.007	0.007	0.031	0.000
	0.002	0.540	0.000	0.007	0.007	0.031	0.000
Point #: 10	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.002	0.557	0.000	0.008	0.008	0.032	0.000
	0.002	0.557	0.000	0.008	0.008	0.032	0.000
Point #: 11	CO	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.002	0.540	0.000	0.007	0.007	0.031	0.000
	0.002	0.540	0.000	0.007	0.007	0.031	0.000

Stack #: 9

Point #: 14	CO	NH3	NO2	PM 10	PM 2.5	SO2	VOC
Segment #: 1	24.320	24.078	71.760	83.040	83.040	3.890	2.430
	24.320	24.078	71.760	83.040	83.040	3.890	2.430
Point #: 15	CO	NH3	NO2	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.680	0.570	2.040	11.330	11.330	0.180	0.135
	0.680	0.570	2.040	11.330	11.330	0.180	0.135

Commonwealth of Virginia
Department of Environmental Quality

Run Date 12/12/2014 10:16:24 AM

Page 3 of 4

Registration Number : 70225

County - Plant Id: 153-00002

Plant Name : Dominion - Possum Point Power Station

POLLUTANT EMISSIONS REPORT (STACK/POINT) (TONS/YEAR)

Parameter List

Pollutant Type: Criteria Pollutants

Years: 2013 - 2013

Inventory Year 2013

Stack #: 9

Point #: 16	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Stack #: 10

Point #: 17	CO	NH3	NO2	PM 10	PM 2.5	SO2	VOC
Segment #: 1	29.610	24.377	69.360	67.210	67.210	4.090	1.580
	29.610	24.377	69.360	67.210	67.210	4.090	1.580

Point #: 18	CO	NH3	NO2	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.852	0.571	1.940	11.810	11.810	0.115	0.235
	0.852	0.571	1.940	11.810	11.810	0.115	0.235

Point #: 19	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Stack #: 11

Point #: 20	CO	NH3	NO2	PB	PM 10	PM 2.5	SO2	VOC
Segment #: 1	0.035	0.215	2.457	0.000	0.510	0.510	0.040	0.275
Segment #: 2	0.000	0.000	0.000		0.000	0.000	0.000	0.000
	0.035	0.215	2.457	0.000	0.510	0.510	0.040	0.275

Stack #: 12

Registration Number: 70225

County - Plant ID: 153-00002

Plant Name: Dominion - Possum Point Power Station

POLLUTANT EMISSIONS REPORT (PLANT) (Tons/Year)

Parameter List

Pollutant Type: Hazardous Pollutants

Years: 2013-2013

	HGC	MNC	NIC	SBC	SEC	TOLU
2013	0.000	0.005	0.144	0.007	0.000	1.728



70225

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 10009, Richmond, Virginia 23240

Fax (804) 698-4500 TDD (804) 698-4021

www.deq.state.va.us

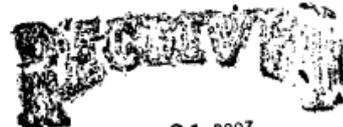
W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Robert G. Burnley
Director

(804) 698-4000
1-800-592-5482

February 20, 2003

Ms. Pamela F. Faggert
Vice President & Chief Environmental Officer
Dominion Generation
5000 Dominion Boulevard
Glen Allen, Virginia 23060



FFR 21 2003

F50

PAM
Dear Ms. Faggert:

We are writing to you as a follow-up to our recent meeting to discuss issues with facilities that you have in the Virginia portion of the National Capital nonattainment area.

As you may recall, that area was originally a serious nonattainment area required to meet the one-hour ozone standard by the end of the 1999 ozone season. We did not attain the one hour ozone standard by that date, and EPA tried to give us an extension until 2005, because of transport that the area could not control. EPA was sued over this extension and lost. As a result, the area has been bumped up to severe with the requirement that we achieve the one hour standard by the end of the 2005 ozone season. We are currently working on a revised State Implementation Plan with the added requirements imposed on a severe area. We hope to have this drafted by July of 2003.

Even under the prior plan we had a strict NOx budget for the ozone season, and we plan to require sources to live within their allocation of the Total NOx Cap for the Washington area. For your Possum Point facility the allowed emissions for the upcoming and future ozone seasons are 1,045 tons for the period between May 1, 2003, and September 30, 2003. As you know compliance with the one-hour ozone standard depends on values during the 2003, 2004, and 2005 ozone seasons. Similar levels are required in the 2004

Ms. Pamela F. Faggert
February 20, 2003
Page Two

and 2005 ozone seasons. These limits will be reflected in your Title V permit and/or a state operating permit.

You should also keep in mind the penalty provisions of section 185 of the Clean Air Act that apply to any major source, if we fail to achieve the ozone standard by 2005. In a nut shell, there is a \$5,000 per ton penalty adjusted for the CPI (probably about \$7,200 per ton now) for all emissions in excess of 80% of what you are allowed to emit for both VOC and NOx.

As you also know, Virginia has adopted a NOx trading rule that becomes a reality in May of 2004. Virginia has always maintained, and continues to do so, that trading cannot be used to satisfy emission caps in nonattainment areas. To do so would jeopardize our ability to attain the health based standards. We may consider trading within the Washington DC, nonattainment area as long as the overall emission budget for the area is met. The NOx emission budget is based on a nominal emission rate of 0.15 lbs/million BTU. Trading outside of the Washington, DC, nonattainment area will not be allowed.

We are confident that you are just as anxious as we are to achieve the health based standards in 2005 so that citizens in that area have clean air to breathe and that we can avoid the draconian consequences of "failing to attain".

If you have questions about this or wish to discuss it further, please let us know.

Sincerely,


John M. Daniel, Jr., P.E., DEE
Director, Air Division

JMD/jw

cc: Richard F. Weeks
Judith Katz
James E. Sydnor
Terry H. Darton
Jeffrey A. Steers
Michael Dowd
Alice G. Nelson

APPENDIX C
Acid Rain Permit Application, Phase II NO_x Compliance Plan,
and Phase II NO_x Averaging Plan

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



BY U.S. MAIL, RETURN RECEIPT REQUESTED

June 21, 2012

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



RE: Title IV Acid Rain Permit, Phase II NO_x Compliance Plan, and Phase II NO_x Averaging Plan Renewals, Possum Point Power Station, DEQ Air Reg. No. 70225

Dear Mr. Darton:

A Phase II Acid Rain Permit Application for the renewal of the Acid Rain Permit for Possum Point Power Station is enclosed. The renewal forms for the Phase II NO_x Compliance Plan and a revised Phase II NO_x Averaging Plan are also enclosed.

Please contact Andy Gates at (804) 273-2950 if you need any additional information.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth W. Rille".

for Cathy C. Taylor,
Director, Electric Environmental Services

Enclosures

Permit Requirements

STEP 3

Read the standard requirements.

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

Monitoring Requirements

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

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Possum Point Power 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

Possum Point Power Station

Facility (Source) Name (from STEP 1)

submission of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, 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:

Possum Point Power Station

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

(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

Effect on Other Authorities, 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;

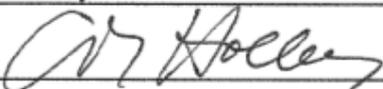
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

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

STEP 4
Read the certification statement, sign, and date.

Certification

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

Name C. D. Holley	
Signature 	Date 6/21/2012



Phase II NO_x Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9
This submission is: New Revised

Page of

STEP 1

Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name Poosum Point Power Station	State VA	ORIS Code 3804
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID# 3	ID# 4	ID#	ID#	ID#	ID#
Type T	Type T	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

<input type="checkbox"/>					
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(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

<input type="checkbox"/>					
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(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)

<input type="checkbox"/>					
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(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase I tangentially fired boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(j) NO_x Averaging Plan (include NO_x Averaging form)

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging form)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Plant Name (from Step 1) Possum Point Power Station
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STEP 2, cont'd.

	ID# 3	ID# 4	ID#	ID#	ID#	ID#
	Type T	Type T	Type	Type	Type	Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

STEP 3

Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

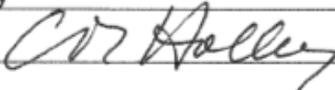
Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

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

Name C. D. Holley	
Signature 	Date 06/21/2012



Phase II NO_x Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: New Revised

Page 1 of 3

STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
Bremo Power Station (3796)	VA	3	0.46	0.80	1,447,000
Bremo Power Station (3796)	VA	4	0.46	0.46	1,059,000
Chesapeake Energy Center (3803)	VA	1	0.40	0.65	2,183,000
Chesapeake Energy Center (3803)	VA	2	0.40	0.65	2,225,000
Chesapeake Energy Center (3803)	VA	3	0.46	0.40	6,616,000
Chesapeake Energy Center (3803)	VA	4	0.40	0.40	2,812,000

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.39

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i}$$

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.41

$$\frac{\sum_{i=1}^n [R_{Ri} \times HI_i]}{\sum_{i=1}^n HI_i}$$

≤

Where,

- R_{Li} = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R_{Ri} = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI_i = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

Plant Name (from Step 1) **Possum Point Power Station**

NO_x Averaging - Page 2

STEP 3

Mark one of the two options and enter dates.

This plan is effective for calendar year _____ through calendar year _____ unless notification to terminate the plan is given.

Treat this plan as **5** identical plans, each effective for one calendar year for the following calendar years: 2013, 2014, 2015, 2016 and 2017 unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO_x under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

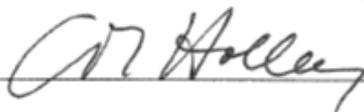
The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

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

Name **C. D. Holley**

Signature



Date **6/21/2012**

APPENDIX D
RACT Consent Agreement of June 12, 1995



RVII-751-95

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Peter W. Schmidt
Director

Northern Virginia Region
Springfield Office
Springfield Corporate Center, Suite 310
6225 Brandon Avenue
Springfield, Virginia 22150
(703) 644-0311

Gregory L. Clayton
Regional Director

CONSENT AGREEMENT

WITH

Virginia Electric and Power Company
P.O. Box 26666
Richmond, Virginia 23261

Registration No. 70225

SECTION A: Purpose

This Agreement establishes a Reasonably Available Control Technology (RACT) standard for the Virginia Electric and Power Company for the control of volatile organic compounds (VOC) and nitrogen oxides (NO_x) emissions at the Possum Point Generating Station as required by Sections 120-04-0407 and 120-04-0408 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This RACT standard shall be the basis for VOC and NO_x emissions control for this plant.

SECTION B: References

Unless the context indicates otherwise, the following words and terms have the meanings assigned to them below:

"Agreement" means this Consent Agreement.

"Board" or "SAPCB" means the State Air Pollution Control Board, a collegiate body of the Commonwealth of Virginia described in § 10.1-1301 of the Code. Particular powers and duties of the Board are described in Section C of this document.

"Code" means the Code of Virginia.

"Combustion Turbine" (See definition of "Unit.")

"DEQ" means the Department of Environmental Quality, an agency of the Commonwealth described in § 10.1-1183 of the Code.

Event	Date	Initials
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"Director" means the Director of the Department of Environmental Quality. Particular powers and duties of the Director are described in Section C of this document.

"EPA" means the United States Environmental Protection Agency.

"Major Stationary Source" means any stationary source which emits, or has the potential to emit 100 tons per year or more of any pollutant subject to regulation under the federal Clean Air Act, or 50 tons per year or more of volatile organic compounds or nitrogen oxides in ozone nonattainment areas classified as serious in Appendix K of the SAPCB Regulations. The area in which the affected facility is located is a nonattainment area classified as serious in Appendix K of the SAPCB Regulations.

"Non-CTG" means a source type for which the EPA has not issued a Control Technique Guideline (CTG), and thus has not established RACT for that source type.

"NO_x" means nitrogen oxides as defined by Section 120-01-02 of the SAPCB Regulations.

"Reasonably Available Control Technology" or "RACT" means the lowest emission limit that a particular source is capable of meeting by the application of control technology that is both reasonably available, as well as technologically and economically feasible.

"Regional Director" means the Director of the Northern Virginia Regional Office of the Department of Environmental Quality, 6225 Brandon Avenue, Suite 310, located in Springfield, Virginia.

"SAPCB Regulations" means the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

"SIP" means the State Implementation Plan.

"Theoretical potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. It is based on emissions at design capacity or maximum production and maximum operating hours (8,760 hours per year) before add-on controls, unless the source is subject to state and federally enforceable permit conditions which limit production rates or hours of operation.

"Units" means the individual electrical generating systems at Virginia Power's Possum Point Station, several of which utilize boilers to produce steam externally to the generator turbines, and the remainder of which are combustion turbines in which the combustion of fuel oil directly powers the generator turbines. Each of Virginia Power's eleven units are uniquely designated by one of the numbers from 1 through 11.

"Virginia Power" or "affected facility" means Virginia Electric and Power Company's Possum Point Generating Station located at 19000 Possum Point Road, Dumfries, Virginia.

"VOC" means volatile organic compounds as defined by Section 120-01-02 of the SAPCB Regulations.

SECTION C: Authority

1. Chapter 13 of Title 10.1 of the Code creates the Board and vests in it the authority to supervise and control various aspects of air pollution in the Commonwealth. Among the Board's powers is the authority to promulgate regulations "abating, controlling and prohibiting" air pollution, found in § 10.1-1308 of the Code.
2. Pursuant to its authority, the Board has promulgated the SAPCB Regulations, which first took effect March 17, 1972 and have been periodically amended.
3. Pursuant to § 10.1-1307 D of the Code, the Board has the authority to issue orders to diminish or abate the causes of air pollution and to enforce its regulations. Orders of the Board are enforceable pursuant to §§ 10.1-1316 and 10.1-1320 of the Code.
4. The Director is the executive officer of the Board. Under § 10.1-1307.2 A of the Code, the Director is to perform those duties required of him by the Board. Additionally under § 10.1-1307.3 of the Code, the Director has such powers to supervise, administer and enforce the provisions of Chapter 13 of Title 10.1 of the Code, as well as the regulations and orders of the Board, as are conferred upon him by the Board. The powers and duties conferred and imposed upon the Director under §§ 10.1-1307.2 and 10.1-1307.3 of the Code are continued under § 10.1-1185 of the Code.
5. Under § 10.1-1307.2 B of the Code, the Director may be vested with the authority of the Board when it is not in session, subject to such regulations or delegation as may be prescribed by the Board. Appendix F of the SAPCB Regulations contains the Delegation of Authority from the Board to the Director. In Section II A of Appendix F the Director is given the authority, with some exceptions, to act for the Board when it is not in session and to issue consent orders and emergency special orders.

SECTION D: Findings

1. Virginia Power operates an electric power generating station at 19000 Possum Point Road in Prince William County, near Dumfries, Virginia.
2. Sections 120-04-0407 and 120-04-0408 of the SAPCB Regulations, which became effective on July 1, 1991 and January 1, 1993,

respectively, require RACT for all non-CTG major stationary sources of VOC emissions and all major stationary sources of NO_x emissions in the Northern Virginia Ozone Nonattainment Area, which includes the Cities of Alexandria, Fairfax, Falls Church, Manassas, Manassas Park, and the Counties of Arlington, Fairfax, Loudoun, Prince William and Stafford.

3. By letter dated February 25, 1993, DEQ notified Virginia Power that Virginia Power may be subject to RACT for both VOC and NO_x emissions. The letter required Virginia Power to notify DEQ of Virginia Power's RACT applicability status, make a commitment to determine what would constitute RACT, and provide DEQ with a schedule for achieving compliance by May 31, 1995.
4. By letter dated April 1, 1993, Virginia Power notified DEQ that boiler Units 3, 4, and 5 at the Possum Point Power Station are subject to RACT for NO_x emissions. The letter stated that boiler Units 1 and 2 and all of the combustion-turbine units (Units 6-11) are exempt due to their annual capacity factors being less than 5 percent, the exemption level set by Section III. C. 2. of Appendix T of the SAPCB Regulations. The letter further stated that the Possum Point Station is subject to RACT for VOC emissions, but that the conclusion presented to the DEQ in letters dated October 1, 1991 and April 1, 1992 that no VOC emissions control would be appropriate as RACT is still valid.
5. By letter dated May 21, 1993, Virginia Power presented to DEQ a schedule for RACT implementation. The schedule had a due date of January 1, 1994 for Virginia Power to submit a NO_x RACT determination and assumed that EPA review and public comment would be complete by March 1, 1994.
6. By letter to Virginia Power dated June 15, 1993, DEQ stated that Virginia Power was not allowing enough time in the schedule proposed May 21, 1993, for DEQ and EPA review and public comment following submission of the RACT determination. The letter further stated that a new RACT determination was necessary for VOC emissions.
7. By letter dated September 30, 1993 and corrections dated October 19, 1993, Virginia Power submitted to DEQ a VOC RACT determination with analysis that concluded that no technology beyond the combustion efficiency of the boilers as designed is available for control of VOC emissions from coal-fired boilers. It also demonstrated that VOC emissions controls on the combustion turbines would not be cost effective.
8. Virginia Power determined and presented in its letter to DEQ dated October 19, 1993 that the theoretical potential to emit VOC emissions from the Possum Point Station units is as follows:

Unit 1	20.6	tons per year		
Unit 2	20.6	"	"	"
Unit 3	13.6	"	"	"
Unit 4	28.2	"	"	"
Unit 5	180.8	"	"	"
All Combustion Turbines	<u>117.9</u>	"	"	"
Total	381.7	"	"	"

9. DEQ has estimated that the theoretical potential to emit NO_x emissions for each of the units at the Possum Point Station is as follows:

Unit 1	1,158	tons per year		
Unit 2	1,155	"	"	"
Unit 3	2,571	"	"	"
Unit 4	5,311	"	"	"
Unit 5	8,889	"	"	"
All Combustion Turbines	<u>4,843</u>	"	"	"
Total	23,927	"	"	"

10. DEQ recognizes that Units 1 and 2 and the combustion turbines (Units 6 through 11) operate only a small fraction of each year, so the actual emissions are much smaller than the theoretical potential to emit. However, it cannot be stated with certainty that the potential to emit for VOC emissions presented in Paragraph D.8. is greater than the actual VOC emissions, since the appropriateness of the emission factors used to determine the potential VOC emissions is uncertain.
11. By letters dated December 10 and 14, 1993, and January 17 and 21, 1994, and summarized by letter dated March 4, 1994, Virginia Power submitted to DEQ a proposal to meet NO_x RACT by complying with the maximum allowable emission rates given in Table T-1 of Appendix T of the SPCB Regulations.
12. Virginia Power proposes to meet the emission rate limits of Appendix T of the SPCB Regulations by applying the emission allocation system given in Section IV of Appendix T. In the system given in Section IV, a mass emission rate for each unit is calculated by multiplying the relevant emission rate limit given in Table T-1 of Appendix T by the unit's heat input rate at maximum capacity. The mass emission rates are summed for all the units subject to NO_x RACT to obtain a total limit. New individual limits can be set for each unit, so long as the sum of the products of those limits and their respective maximum heat input rates total to no more mass emissions than the total limit derived

by using the emission rate limits given in Table T-1. Compliance must be demonstrated on a daily basis.

13. By letter to DEQ, dated June 9, 1994, Virginia Power has proposed individual NO_x emission limits for Units 3, 4, and 5 which DEQ has confirmed will comply with the allocation system in Section IV of Appendix T of the SAPCB Regulations.
14. By letter to DEQ, dated March 4, 1994, Virginia Power has stated that following the installation of NO_x emissions controls it may seek a different allocation of emissions per unit, in accordance with Section IV. D. of Appendix T of the SAPCB Regulations.
15. Virginia Power proposes to comply with the NO_x RACT emission limits by the following methods:
 - a. Installing NO_x advisory systems (NAS) on Units 3 and 4. An NAS is a computerized modeling technology incorporated into a boiler control system to predict control settings to minimize NO_x emissions.
 - b. Retrofitting Unit 4 with Low-NO_x burners.
 - c. Monitoring the nitrogen content of the fuel purchased for Unit 5.
16. By letter to DEQ, dated March 10, 1994, Virginia Power requested that it be allowed to discontinue use of one or more of the NAS once the low-NO_x burners on Unit 4 are operational and if operating experience shows that the requirements of Appendix T of the SAPCB Regulations can be met without the NAS. Because the SAPCB regulations require only that a specific heat input-based emission rate be achieved and do not state that a particular (or any) control equipment be applied, the Board should allow Virginia Power to discontinue use of one or more of the NAS to the extent that the applicable limits in this agreement can still be met. However, DEQ believes that a successful compliance demonstration period of at least 90 days is necessary to show that compliance can truly be attained without the NAS.
17. Virginia Power proposes to demonstrate compliance with NO_x RACT emission limits by obtaining hourly NO_x emissions data from Units 3, 4, and 5 by means of continuous emissions monitoring (CEM) systems that Virginia Power is required to install for purposes of Title IV of the federal Clean Air Act.
18. DEQ has determined that the NO_x controls proposed by Virginia Power are acceptable control measures for achieving the RACT emission limits, but are not by themselves, evidence of compliance.

19. DEQ has determined that Virginia Power's findings in Paragraph D.7. that no control of VOC emissions from the boilers is reasonably available beyond that resulting from good combustion efficiency of the boilers as designed, and that VOC emissions controls on the combustion turbines would be unreasonably expensive are correct. However, DEQ has determined that striving for the maximum combustion efficiency is contrary to the measures that reduce NO_x emissions and that Virginia Power needs to apply good combustion practices that are standard for the utility industry, although such practices may not necessarily result in the highest possible boiler efficiency.
20. For any units that are determined by Virginia Power to be exempt from NO_x RACT on the grounds that their annual capacity factors have historically been less than 5 percent and that exceed a 5 percent annual capacity factor in the future, Section III. C. 2. of Appendix T of the SAPCB Regulations provides that those units then become subject to SAPCB Regulations regarding NO_x RACT.
21. Setting VOC emissions limits on the basis of estimates calculated from EPA Publication AP-42, Table 1.1-11 emission factors is questionable, since actual VOC emission rates are extremely dependent on the particular boiler and fuel in question. Furthermore, the emission rate of VOC emissions may vary due to factors such as temperature fluctuation or variation in coal VOC content while Virginia Power is operating within the constraints of RACT, in other words, good combustion practices. Therefore, no fixed VOC emission limit should be set as part of this agreement.
22. SAPCB Regulations 120-04-0406 and 120-04-0408 stipulate that RACT subject facilities must achieve "compliance with the emission standard as expeditiously as possible but no later than May 31, 1995." However, despite Virginia Power's commencement of activities prior to the signing of this agreement to implement the anticipated RACT, it became apparent long ago that, with respect to NO_x, Virginia Power could not comply with the statutory compliance deadline, but could meet a May 31, 1996 deadline. By letter to DEQ, dated March 4, 1994, Virginia Power indicated that it requires a lead time of 16 and 1/2 months in order to order and install the low-NO_x burners for Unit 4. The letter also explains that the low-NO_x system is likely to perform better if a reasonable extension beyond the due date is granted. In addition, if given an extension until May 31, 1996, Virginia Power (and potentially its customers) will save approximately \$700,000 in additional fuel expenses that would otherwise be incurred as a result of deviating from the planned maintenance schedule. Meanwhile, the additional NO_x emissions will result in a difference in daily NO_x emissions for the Washington SMSA (based on Metropolitan Council of Governments data) of only 0.25 percent. A set of milestones should be set to ensure that Virginia Power is making progress toward complying with RACT as expeditiously as possible. The imposition, effective May 31, 1995 and lasting

throughout the extension period, of NO_x limits reflective of the application of the NO_x advisory systems (NAS) on Units 3 and 4 would be an appropriate milestone.

23. DEQ believes that appropriate interim NO_x limits reflective of application of the NAS during the extension period cannot be established prior to trial operation of the units with and without the NAS. Interim limits are nevertheless necessary, since combustion adjustments continuously recommended by the NAS will not be made automatically and Virginia Power may find that it would be more economical to operate without the adjustments. The interim limits should not necessarily represent the lowest NO_x emissions rates achievable using the NAS, but should represent reasonable interim progress toward meeting the RACT limits to be imposed at the end of the extension period while maintaining a reasonable cost to benefit ratio. Virginia Power has reported that Unit 3 has been out of service for repairs since the spring of 1994 and is expected to return to service in January, 1995. Federal monitoring regulations require that the CEM system on Unit 3 be certified within 90 days after the unit resumes operation. Virginia Power experience with other CEM systems suggests that the full 90 days may be needed. Being that the NAS will be the first two ever put in service, it may take months to optimize their performance. Therefore, especially if the repair or certification schedule slips, it may be difficult for interim NO_x limits to be set by May 31, 1995 on the basis of trial operation. Nevertheless, a milestone on the path to full RACT emissions reductions must be reached by that date, so default emissions limits based on potential reductions assumed in the RACT analysis will be imposed.
24. Unit 5 will not require any modifications in order to comply with the NO_x emissions limits of Appendix T of the SAPCB regulations, whether by itself or under Virginia Power's proposed allocation plan; therefore, emission limits should be made effective May 31, 1995 and not postponed until the total allocation plan goes into effect by May 31, 1996.
25. By letter to DEQ, dated June 9, 1994, Virginia Power has stated that CO and particulate emissions may increase from Unit 4 as a result of applying low-NO_x burners. Virginia Power requests that this agreement recognize the so-called "WEPCO Rule" (40 CFR 52.21(b)(2)(iii)(h)) that exempts projects exclusive to air pollution control which benefit the environment and for which DEQ has not determined that a violation of the National Ambient Air Quality Standards (NAAQS), or any PSD increments will result. Virginia does not currently have a regulation to implement the WEPCO Rule, therefore, the Board cannot acknowledge its application to Virginia Power. However, the Board will honor the intent of the federal WEPCO Rule; thus, language consistent with that of 40 CFR 52.21(b)(2)(iii)(h) is provided in the agreement.

26. DEQ recognizes that the installation of low-NO_x burners on Unit 4 will be environmentally beneficial, and will very likely be more beneficial over a period of years, having been granted an extension of the period before compliance is due, than would be the case if Virginia Power were forced to modify the unit without adequate design, construction, and testing time.
27. Virginia Power, with letters dated September 9, 1994 and November 18, 1994, respectively, submitted a final, combined NO_x and VOC RACT analysis and corrections, incorporating all of the relevant information and decisions presented in the earlier correspondences.
28. The theoretical potential to emit emission rates for Virginia Power after full implementation of this agreement would be as follows:

UNIT	NO _x		VOC [*]	
	<u>lbs/hr</u>	<u>tons/yr</u>	<u>lbs/hr</u>	<u>tons/yr</u>
1	264	1158	4.8	21
2	264	1155	4.8	21
3	531	2324	2.3	10
4	863	3779	4.7	21
5	1948	8534	40.6	178
6 - 11	<u>1106</u>	<u>4843</u>	<u>26.9</u>	<u>118</u>
Total	4976	21,793	84.1	369

* No limits on VOC emissions are included in this agreement, so emission rates shown represent the estimated theoretical potential for the type of boilers and fuel.

SECTION E: Agreement

Accordingly, the Board and Virginia Power agree that:

1. VOC and NO_x emissions from the affected facility shall be controlled and reduced as outlined in this Agreement.
2. NO_x emissions shall be controlled from the boilers of Units 3 and 4 by a NO_x advisory system (NAS), the definition of which is an on-line, computer software-based system that will constantly evaluate data from plant operations and predict appropriate settings for controllable parameters affecting the production of NO_x emissions. This requirement may be amended or deleted by the Board following the installation of the low-NO_x burners required by Paragraph E.4. of this agreement, if Virginia Power can demonstrate that the affected facility complies each day for a period of 90 days with the limits of Paragraph E.7. or alternative limits that meet the specifications of Paragraph E.7. for becoming a Board-approved revision to Paragraph E.7. (a revision does not actually have to be approved by the Board prior to or during the demonstration period). Prior to discontinuing the use of the NAS on either boiler for purposes of commencing the 90-day compliance demonstration of this paragraph, Virginia Power shall notify the Regional Director of the date on which it intends to cease use of the NAS. In order to effect any necessary adjustments, Virginia Power is allowed up to ten days from the date that NAS use first ceases until the first of the 90 consecutive days that Virginia Power will use to demonstrate compliance for the purposes of requesting that the Board amend or delete the NAS requirement. If for any day following the 10-day adjustment allowance period, Virginia Power fails to comply with the limits, the demonstration period shall be suspended immediately, and use of the NAS shall be resumed within 24 hours. The Regional Director shall be informed of the demonstration failure within one business day. Commencement of a new demonstration period at a later date is at the discretion of the Board.
3. NO_x emissions shall be further controlled from the boiler of Unit 4 by application of low-NO_x burners.
4. No NO_x emissions control is mandatory for Unit 5; however, Virginia Power shall apply whatever measures are necessary, to ensure that compliance with the emission limit in Paragraph E.7. of this agreement is maintained. Such measures may include, but are not limited to monitoring the nitrogen content of the fuel oil. Measures that result in any increase in other types of emissions shall not be applied unless approved by the Regional Director.
5. VOC emissions shall be controlled from the boilers of Units 3, 4, and 5 by maintaining good combustion practices. Good combustion practices are defined as those combustion practices which are

commonly recognized in the utility industry as essential to maintain optimal performance from utility boilers while operating in compliance with all emission limits, and include, but not limited to reasonable vigilance of the operating parameters and reasonable preventive maintenance of the boilers.

- 6. During the months of June, July, and August, there shall be no planned shutdown of Unit 4 unless Unit 3 is also down simultaneously.
- 7. NO_x emissions (measured as if converted to NO₂) shall be limited to the following:

<u>Boiler</u>		<u>Per million Btu's heat input</u>
Unit 3	-	0.47 lbs
Unit 4	-	0.37 lbs
Unit 5	-	0.24 lbs

taken as the average of hourly (or more frequent) readings of the mass emission rates and the heat input rates over each calendar day. After the effective date of this agreement, Virginia Power may request a revision to any or all of the limits of this paragraph, so long as the new limits would not result in a greater total emission rate (lbs/million Btu) from the three units operating at their maximum capacity. The revised limits shall supersede the limits above only with the consent of the Board. Granting of consent is at the Board's discretion. The emissions limits of this paragraph shall become effective May 31, 1995, except that prior to May 31, 1996 the emissions limits for Units 3 and 4 shall be as determined by paragraph E.8. and as inserted by May 31, 1995 in the blanks below:

Interim Limits for Units 3 and 4

<u>Boiler</u>	<u>Limit</u>
Unit 3	_____ lbs per million Btu heat input
Unit 4	_____ lbs per million Btu heat input

If the interim limits for Units 3 and 4 are not established per paragraph E.8 by May 31, 1995, default NO_x interim limits of 0.47 lbs per million Btu shall become effective for Units 3 and 4 on May 31, 1995 until either interim limits can be established per paragraph E.8 or May 31, 1996, whichever comes first.

- 8. Not more than 45 days prior to the NO_x advisory systems (NAS) becoming operational, but no later than May 15, 1995, a record of continuously monitored NO_x emissions data (for a duration to be approved by the Regional Director) without the use of NAS and a

similar record of continuously monitored data obtained while conscientiously using the NAS as designed shall be collected for both Units 3 and 4 and submitted to the Regional Director. The Board shall then set individual NO_x emissions limits for Units 3 and 4 on a pounds of emissions per million Btu heat input basis that are no more stringent than limits that represent 80 percent of the average reduction achieved by the use of the NAS over the similar period without NAS. The Board shall propose the limits to Virginia Power for comment no later than May 22, 1995. The limits, which may be revised following comment from Virginia Power, shall become effective on May 31, 1995 and shall be added to Paragraph E.7.

9. Actual NO_x emissions shall be determined by continuous monitoring. A continuous emissions monitoring (CEM) system shall be installed on each flue from Units 3, 4, and 5 to measure the mass emission rate of NO_x. The CEM systems required by this paragraph shall be operated and maintained in accordance with 40 CFR, Part 75 Subpart C. Unless already completed, a 45-day notification prior to the certification testing of the CEM systems and subsequent required notifications are to be submitted to the Regional Director. Within 60 days of completion of the CEM systems certification testing or prior to May 31, 1995, whichever is earlier, the Department shall be furnished with two copies of a report of the certification testing of all monitoring devices required by this agreement.
10. Quarterly compliance reports of data from the NO_x CEM systems and the heat input records shall be submitted to the Regional Director within 30 days following each calendar quarter. As a minimum the compliance reports shall contain:
 - a. Unit operating hours during the quarter.
 - b. The paragraph E.7 NO_x emission rate limit for each unit.
 - c. All hourly NO_x emission rates (lbs/10⁶ Btu).
 - d. A table of the average NO_x emission rate per million Btu's for each unit for each calendar day during the quarter.
 - e. Reasons for any violations of the emission limits and any corrective action taken.
 - f. Dates and times of all CEM system outages and corrective actions taken.
 - g. Results of the daily CEM system calibration drift checks.
 - h. Results of the 40 CFR, Part 75, quality assurance audits.

Data that may or must be tabulated to comply with this paragraph may be presented in the quarterly report either as one table or any number of separate tables.

11. Virginia Power shall comply with requirements of this agreement on or before the dates presented below:

May 08, 1995	The NO _x advisory systems (NAS) on Units 3 and 4 are operational for testing purposes. (See Paragraphs E.2. and E.8.)
May 15, 1995	Submission of data comparing emissions with and without NAS. (See Paragraph E.8.)
May 31, 1995	Interim NO _x emissions limits reflective of NAS. (See Paragraphs E.7. and E.8.)
" "	Maintain good combustion practices. (See Paragraph E.5.)
May 31, 1996	Low-NO _x burners installed and operating on Unit 4. (See Paragraph E.3.)
" "	No planned outage of Unit 4 without Unit 3 shutdown. (See Paragraph E.6.)
" "	NO _x emissions limits based on allocation. (See Paragraph E.7.)

Virginia Power shall comply with the remaining requirements in this agreement by May 31, 1995. Among others, the remaining requirements include the installation, performance evaluation, and performance report on the NO_x CEMs, which may be completed much earlier to comply with requirements of Title IV of the federal Clean Air Act.

12. In order to minimize the duration and frequency of excess emissions due to malfunctions of process or air pollution control equipment, including the NO_x Advisory System (NAS), Virginia Power shall develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance, including dates and duration of any outages. These records shall be maintained on site (or available for inspection on site via computer video screen or computer printout) for a period of five years and shall be made available to the DEQ upon request.
13. For units that are determined by Virginia Power to be exempt from NO_x RACT on the grounds that their annual capacity factors have historically been less than 5 percent and that exceed a 5 percent annual capacity factor in the future, those units shall become

subject to SAPCB Regulations regarding NO_x RACT, as provided in Section III. C. 2. of Appendix T of the SAPCB Regulations.

14. DEQ has determined that the physical changes or changes in methods of operation required by this agreement, by themselves, do not subject the units to "new source" review or permitting requirements; provided, however, if DEQ subsequently determines that the changes resulting from this agreement will result in a significant net increase in annual emissions of any criteria pollutant and such increase causes or contributes to a violation of any national ambient air quality standard or PSD increment, DEQ reserves the right to alter this agreement to require the elimination or reduction of such significant net increase.
15. At any time in the future, should Virginia Power plan any modifications (as defined by the Board) of the affected facility covered by this Agreement, Virginia Power shall have the right to apply to the Board and the Board may consent to such modifications provided such modifications will meet all of the regulatory requirements in existence at that time.
16. The Board may modify, rewrite, or amend this Agreement with the consent of Virginia Power, for good cause shown by Virginia Power, or on its own motion after notice and an opportunity for a hearing.
17. So long as this Agreement remains in effect, Virginia Power waives the right to any hearing pursuant to §§ 9-6.14:11 and 9-6.14:12 of the Code and to judicial review of any issue of fact or law contained herein. Nothing herein, however, shall be construed as a waiver of the right to a hearing or to judicial review of any action taken by the Board to enforce this Agreement.
18. Failure by Virginia Power to comply with any of the terms of this Agreement shall constitute a violation of an Agreement of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority nor shall it diminish Virginia Power's right to a fair hearing or judicial review of any enforcement action taken.
19. Virginia Power declares it has received fair and due process under the Administrative Process Act (§ 9-6.14:1 et. seq.).
20. This Agreement shall become effective upon signature by both parties and shall continue in effect indefinitely or until otherwise terminated by the Board.

The foregoing Consent Agreement has been executed on behalf of the STATE AIR POLLUTION CONTROL BOARD of the COMMONWEALTH OF VIRGINIA and on behalf of Virginia Electric and Power Company, each by its duly authorized representatives, or self, on the dates indicated below.

DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE COMMONWEALTH OF VIRGINIA

JUNE 12, 1995

(date)

BY:

John W. Danieles
Peter W. Schmidt
Director

VIRGINIA ELECTRIC AND POWER COMPANY

MAY 25, 1995
(date)

BY:

William R. Cartwright
William R. Cartwright
Vice President,
Fossil and Hydro Operations

COMMONWEALTH OF VIRGINIA
CITY OF RICHMOND

The foregoing instrument was acknowledged before me this 25th day of MAY, 1995, by William R. Cartwright, Vice President, Fossil and Hydro Operations of Virginia Electric and Power Company, a Virginia Corporation, on behalf of the Corporation.

My commission expires

7/31/97

Michael H. Snow
Notary Public

APPENDIX E

October 31, 1996 Letter Vacating NOx Portion of the June 12, 1995 RACT Consent Agreement



NVRO-C-023-96

COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen
Governor

Becky Norton Dunlop
Secretary of Natural Resources

Northern Virginia Region
Mobile Source Operations Section
7240 D Telegraph Square Drive
Lorton, Virginia 22079
(703) 339-8553
Fax (703) 339-3722

Thomas L. Hopkir
Director

Gregory L. Clayto
Regional Director

October 31, 1996

Mr. A. W. Hadder
Virginia Power
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Subject: Possum Point Power Station RACT, Reg. #70225

Dear Mr. Hadder:

This letter responds to your letters to Terry Godar, dated October 4 and 7, 1996. We have reviewed both of these letters and offer the following:

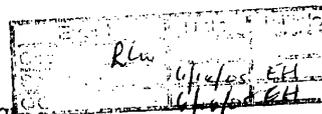
Letter of October 4, regarding NO_x RACT compliance program - We hereby approve the program stated in your letter.

Letter of October 7, regarding demonstration without NO_x Advisory System (NAS) - Based on the material you have submitted, we have determined that you have complied with the NO_x requirements of the original Consent Agreement which was in effect during the time of the demonstration. You are hereby relieved of the requirement to operate the NAS on Unit #4, retroactive to September 15, 1996. You must continue to meet the NO_x emission limits on Unit #4 and utilize the NAS on Unit #3 as described in your letter of October 4, in accordance with 9 VAC 5-40-310.

Attached please find your official, signed copy of the new Consent Agreement effective October 10, 1996. This agreement vacates the NO_x portion of the June 12, 1995, Consent Agreement, in that these conditions have been fulfilled. It requires that Virginia Power demonstrate compliance with NO_x RACT at Possum Point in accordance with 9 VAC 5-40-310 and 9 VAC 5-10-20, Appendix T of the SAPCB Regulations.

The VOC portion of the June 12, 1995, Consent Agreement is still valid and federally enforceable.

An Agency of the Natural Resources Secretariat



Mr. A. W. Hadder
October 31, 1996

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If you have any questions, or if I can be of further assistance, please feel free to give me a call at (703) 583-3868. Terry Godar can be reached at (703) 583-3845.

Sincerely,



Alice G. Nelson
Air Compliance Manager

AGN/TJG/JRM

Enclosure

cc: Robert Mann, APD
Alan Laubscher, Regional Permit Manager



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

George Allen
Governor

Becky Norton Dunlop
Secretary of Natural Resources

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Thomas L. Hopkins
Director

Gregory L. Clayton
Regional Director

CONSENT AGREEMENT

WITH

Virginia Electric and Power Company
P.O. Box 26666
Richmond, Virginia 23261

Registration No. 70225

SECTION A: Purpose

This Agreement vacates the nitrogen oxide (NO_x) portion of the Consent agreement dated June 12, 1995 (effective May 31, 1995) which established a Reasonably Available Control Technology (RACT) standard for the Virginia Electric and Power Company for the control of volatile organic compounds (VOC) and nitrogen oxides (NO_x) emissions at the Possum Point Power Station as required by 9 VAC 5-40-300 and 9 VAC 5-40-310 (formerly Sections 120-04-0407 and 120-04-0408, respectively) of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

SECTION B: References

Unless the context indicates otherwise, the following words and terms have the meanings assigned to them below:

"Agreement" means this Consent Agreement.

"Board" or "SAPCB" means the State Air Pollution Control Board, a collegiate body of the Commonwealth of Virginia described in § 10.1-1301 of the Code. Particular powers and duties of the Board are described in Section C of this document.

"Code" means the Code of Virginia.

"DEQ" means the Department of Environmental Quality, an agency of the Commonwealth described in § 10.1-1183 of the Code.

"Director" means the Director of the Department of Environmental Quality. Particular powers and duties of the Director are described in Section C of this document.

"EPA" means the United States Environmental Protection Agency.

"Regional Director" means the Director of the Northern Virginia Regional Office of the Department of Environmental Quality, 6225 Brandon Avenue, Suite 310, located in Springfield, Virginia.

"SAPCB Regulations" means the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution (9 VAC 5 Chapters 10 through 80).

"SIP" means the State Implementation Plan.

"Virginia Power" or "affected facility" means Virginia Electric and Power Company's Possum Point Power Station located at 19000 Possum Point Road, Dumfries, Virginia.

SECTION C: Authority

1. Chapter 13 of Title 10.1 of the Code creates the Board and vests in it the authority to supervise and control various aspects of air pollution in the Commonwealth. Among the Board's powers is the authority to promulgate regulations "abating, controlling and prohibiting" air pollution, found in § 10.1-1308 of the Code.
2. Pursuant to its authority, the Board has promulgated the SAPCB Regulations, which first took effect March 17, 1972 and have been periodically amended.
3. Pursuant to § 10.1-1307 D of the Code, the Board has the authority to issue orders to diminish or abate the causes of air pollution and to enforce its regulations. Orders of the Board are enforceable pursuant to §§ 10.1-1316 and 10.1-1320 of the Code.
4. The Director is the executive officer of the Board. Under § 10.1-1307.2 A of the Code, the Director is to perform those duties required of him by the Board. Additionally under § 10.1-1307.3 of the Code, the Director has such powers to supervise, administer and enforce the provisions of Chapter 13 of Title 10.1 of the Code, as well as the regulations and orders of the Board, as are conferred upon him by the Board. The powers and duties conferred and imposed upon the Director under §§ 10.1-1307.2 and 10.1-1307.3 of the Code are continued under § 10.1-1185 of the Code.
5. Under § 10.1-1307.2 B of the Code, the Director may be vested with the authority of the Board when it is not in session, subject to such regulations or delegation as may be prescribed by the Board. 9 VAC 5-10-20, Appendix F of the SAPCB Regulations contains the

Delegation of Authority from the Board to the Director. In Section II A of Appendix F the Director is given the authority, with some exceptions, to act for the Board when it is not in session and to issue consent orders and emergency special orders.

SECTION D: Findings

1. The purpose of the June 12, 1995 Consent Agreement (effective May 31, 1995) was to establish the VOC RACT standard for the Virginia Power Possum Point Power Station and to provide a delayed schedule for compliance with the NOx RACT Standard contained in 9 VAC 5-10-20, Appendix T of SAPCB Regulations.
2. Control technology has been installed on Possum Point Unit 4 which eliminates the need for a delayed compliance schedule.

SECTION E: AGREEMENT

Accordingly, the Board and Virginia Power agree that:

1. The portions of the June 12, 1995 Consent Agreement (effective May 31, 1995) between the Board and Virginia Power, relating to NOx RACT, are vacated as of the date of this agreement.
2. Compliance with NOx RACT at the Virginia Power Possum Point Power Station shall be demonstrated with 9 VAC 5-40-310 and 9 VAC 5-10-20, Appendix T of SAPCB Regulations.