

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02300003-2021**
Application Received: **March 1, 2021**
Plant Identification Number: **023-00003**
Permittee: **Virginia Electric and Power Company**
Facility Name: **Mt. Storm Power Station**
Mailing Address: **120 Tredegar Street, Richmond, VA 23219**

Physical Location: Mt. Storm, Grant County, West Virginia
UTM Coordinates: 649.85 km Easting • 4340.00 km Northing • Zone 17
Directions: Off of State Route 93, two (2) miles west of Bismark. From the intersection of Route 93 into Davis, WV continue east on Route 93 for approximately 8 miles.

Facility Description

Dominion's Virginia Electric and Power Company's Mt. Storm Power Station is a coal-fired electric generation facility and operates under SIC code 4911 and NAICS code 221112. The facility consists of three (3) coal-fired boilers, two with a rated design capacity of 6,199 mmBtu/hr each and one with a rated design capacity of 5,824 mmBtu/hr, an oil-fired auxiliary boiler with a rated design capacity of 150 mmBtu/hr, and various supporting operations such as coal handling, ash handling, limestone handling, and various tanks with insignificant emissions. The Mt. Storm Power Station has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2020 Actual Emissions
Carbon Monoxide (CO)	11,340.36	935.07
Nitrogen Oxides (NO _x)	9,541.83	1,969.29
Particulate Matter (PM _{2.5})	1,230.83	182.10
Particulate Matter (PM ₁₀)	2,413.90	254.42
Total Particulate Matter (TSP)	2,471.36	895.93
Sulfur Dioxide (SO ₂)	76,553.3*	2,008.94
Volatile Organic Compounds (VOC)	195.35	60.44

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2020 Actual Emissions
Hydrogen Chloride	158.02	9.59
Hydrogen Fluoride	24.19**	11.74
Total of other non-major HAP	7.91	1.81

Some of the above HAPs may be counted as PM or VOCs.

* *The SO₂ PTE change reflects 40 CFR Subpart Da emission limitations for Units 1 and 2 and updated emission factors based on calculated emissions data for all three units.*

** *The change in the hydrogen fluoride PTE corrects a typographical error in the previous renewal fact sheet. It should have been 24.19 tpy based on the 2016 renewal application.*

Title V Program Applicability Basis

This facility has the potential to emit 76,553 tons per year of SO₂, 9,542 tons per year of NO_x, 11,340 tons per year of CO, 2,414 tons per year of PM₁₀, 195 tons per year of VOC, and 190 tons per year of HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Virginia Electric and Power Company's Mt. Storm Power Station is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR2	To Prevent And Control Particulate Air Pollution From Combustion Of Fuel In Indirect Heat Exchangers
45CSR6	Control Of Air Pollution From Combustion Of Refuse

45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers.
45CSR11	Prevention Of Air Pollution Emergency Episodes
45CSR13	Permits For Construction, Modification, Relocation And Operation Of Stationary Sources Of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, And Procedures For Evaluation
45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
45CSR30	Requirements For Operating Permits
45CSR33	Acid Rain Provisions And Permits
45CSR34	Emission Standards For Hazardous Air Pollutants
40 C.F.R 60, Subpart Da	Standards of Performance for Electric Utility Steam Generating Units
40 C.F.R 60, Subpart Y	Standards of Performance for Coal Preparation Plants
40 C.F.R. 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 C.F.R. 60, Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
40 C.F.R. 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 61, Subpart M	National Emission Standard For Asbestos
40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R. Part 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants: Coal- and Oil- Fired Electric Utility Steam Generating Units
40 C.F.R. Part 72	Permits Regulation
40 C.F.R. Part 73	Sulfur Dioxide Allowance System
40 C.F.R. Part 74	Sulfur Dioxide Opt-ins
40 C.F.R. Part 75	Continuous Emissions Monitoring
40 C.F.R. Part 76	Acid Rain Nitrogen Oxides Emission Reduction Program
40 C.F.R. Part 77	Excess Emissions
40 C.F.R. Part 78	Appeals Procedure (for Acid Rain Program)
40 C.F.R. Part 82, Subpart F	Ozone depleting substances
40 C.F.R. Part 97, Subpart AAAAA	CSAPR NO _x Annual Trading Program
40 C.F.R. Part 97, Subpart GGGGG	CSAPR NO _x Ozone Season Group 3 Trading Program
40 C.F.R. Part 97, Subpart CCCCC	CSAPR SO ₂ Group 1 Trading Program
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
<u>State Only:</u>	
45CSR4	To Prevent And Control The Discharge Of Air Pollutants Into The Open Air Which Causes Or Contributes To An Objectionable Odor Or Odors
45CSR43	Cross-State Air Pollution Rule To Control Annual Nitrogen Oxides Emissions, Annual Sulfur Dioxide Emissions, And Ozone Season Nitrogen Oxides Emissions

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0656A	December 14, 2015	
R13-1660D	May 13, 2003	
R13-1661/R14-10	August 12, 1994	
R13-2034E	June 12, 2015	
R13-2735	December 13, 2007	
G60-D056C	January 31, 2020	
R33-3954-2022-5 (Acid Rain Permit)	December 19, 2017	Effective January 1, 2018
Consent Decree: No. 03-CV-517-A/03-CV-603-A (US vs. VEPCO)	October 3, 2003	Effective October 10, 2003 (date entered by the courts)

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

- ❖ This is a renewal of the Title V permit which was issued on September 7, 2016 and modified on September 25, 2017 and June 15, 2020. Substantial changes to the most recent version of the Title V Permit consist of the following:

1) Title V Boilerplate changes

- **Condition 3.5.3.** - This condition has been revised to update the US EPA contact information.

2) Section 1.1. Emission Units Table:

- Corrected typos in the Table:
 - Added “& 1B” in the description for emission unit MTST-00-SAR-CNV-1 which had been previously omitted.
 - Corrected the design capacity for emission unit MTST-02-ADF-MC-1B.

- Corrected the description, date installed and the design capacity for emission unit PTK-1.
 - Corrected the “Emission Point ID” and the design capacity for emission unit FO-TK-03.
 - Corrected the “Year Installed/Modified” date for emission unit RD-10.
- Emission unit MTST-00-FO-TK-1 has been removed from service and from the site. Therefore, it has been removed from the table.

3) Section 3.0 changes:

- Condition 3.1.9. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” Also, 45CSR43 has been added to the citation of authority. The actual requirements have not changed.
- Condition 3.1.10. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” The requirements in this condition have been revised from 40 CFR §97.506 (Subpart BBBBB - *CSAPR NOX Ozone Season Group 1 Trading Program*) to 40 CFR §97.1006 (Subpart GGGGG - *CSAPR NOX Ozone Season Group 3 Trading Program*) in accordance with 40 CFR §52.2540(b). The citation of Authority has been revised to replace 40 CFR §97.506 with 40 CFR §97.1006.
- Condition 3.1.11. – The Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. Specifically, “TR has been replaced with “CSAPR” and “Transport” has been replaced with “Cross-State Air Pollution.” Also, 45CSR43 has been added to the citation of authority. The actual requirements have not changed.

4) Section 4.0 changes:

- Condition 4.1.41. – The requirements of paragraph 78 of the federal consent decree were added into the permit under condition 4.1.41. These requirements were deleted from the previous renewal permit as requested in the 2016 renewal application. The existing requirements of the current permit in condition 4.1.41 have been moved in the new condition 4.1.42 of the renewal permit. Each subsequent condition has been renumbered.
- The MATS Rule 40 CFR 63 Subpart UUUUU has been revised. Therefore, the permit has been updated to the revised MATS language. The revised permit conditions affected by this change are: 4.1.45.(9), 4.1.46.a. and c., 4.1.47., 4.1.50., 4.2.18., 4.2.19., 4.2.21., 4.4.11., 4.5.11., 4.5.14., 4.5.15., 4.5.16. and 4.5.17. Conditions 4.5.18. - 4.5.22. have been added to include the revised MATS language from 40 CFR §§63.100031(f)(1), (f)(2), (f)(4), (f)(5), and (f)(6) which were previously incorporated by reference in condition 4.5.17. 40 CFR §63.100031(f)(3) of the old version of Subpart UUUUU has been deleted and replaced with “Reserved” in the revised version.
- Condition 4.3.3. – Updated the testing results to reflect the most current tests performed on June 9, 2020 for Units 1 and 2, and June 12, 2020 for Unit 3.
- Condition 4.3.14. – The streamlining language for 40 CFR §63.7(b) and the citation of authority for 40 CFR §63.7(b) has been removed from this condition since §63.7(b) is not applicable

40 CFR §63.10040 states: “Table 9 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.” Table 9 of 40 CFR 63 Subpart UUUUU does not list §63.7(b). 40 CFR §63.10030(a) states: “You must submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) **that apply to you** by the dates specified.” [emphasis added] Therefore, since §63.7(b) is not listed in Table 9 it is not applicable.

5) Section 8.0 changes:

- Conditions 8.1.6. and 8.1.10. - Since 40 CFR §§63.6640(f)(2)(ii) and (iii) of 40 CFR 63 Subpart ZZZZ and 40 CFR §§60.4243(d)(2)(ii) and (iii) of 40 CFR 60 Subpart JJJJ have been vacated, these requirements have been deleted from conditions 8.1.6. and 8.1.10.
- Condition 8.1.16(2) – The language in this condition has been revised to delete the reference to paragraphs (f)(2)(ii) and (iii) which do not exist in this condition.
- Condition 8.5.3. – Added the requirements of 40 CFR §60.4214(d) for the emergency fire pumps and removed the requirements referring to the vacated 40 CFR §60.4243(d)(2)(ii) and (iii) requirements.

6) ATTACHMENT A – Deleted. There are no requirements in the permit that reference this attachment.

7) APPENDIX A – As discussed under Item 3) “Section 3.0 changes” above, the Transport Rule (TR) Trading Program nomenclature has been replaced with Cross-State Air Pollution Rule (CSAPR) Trading Program. The Appendix has also been updated to the current DAQ Title V boilerplate for the CSAPR requirements which includes the replacement of 40 CFR §97.506 (Subpart BBBBB - CSAPR NOX Ozone Season Group 1 Trading Program) with 40 CFR §97.1006 (Subpart GGGGG - CSAPR NOX Ozone Season Group 3 Trading Program).

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 60 Subpart D	The Steam Generators potentially subject to this rule commenced construction prior to August 17, 1971.
40 CFR 60 Subpart Db	The Steam Generator potentially subject to this rule commenced construction prior to June 19, 1984.
40 CFR 60 Subpart Dc	This facility does not have Steam Generators less than 100 mmBtu/hr heat input but greater than 10 mmBtu/hr heat input.
40 CFR 60 Subpart K	The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR §60.111(b)) which construction, reconstruction, or modification commenced after June 11, 1973 and prior to May 19, 1978.
40 CFR 60 Subpart Ka	The facility does not include storage vessels that are used to store petroleum liquids (as defined in 40 CFR §60.111a(b)) which construction, reconstruction, or modification commenced after May 18, 1978 and prior to July 23, 1984.

40 CFR 60 Subpart Kb	Storage vessels potentially affected by this subpart have a storage capacity of less than 75 cubic meters and therefore are not subject to this subpart.
40 CFR 60 Subpart GG	The Combustion Turbine potentially subject to this rule commenced construction prior to October 3, 1977 and combusts fuel oil.
40 CFR 60 Subpart KKKK	The Combustion Turbine potentially subject to this rule commenced construction prior to February 18, 2005.
40 CFR 64	Units 1, 2 and 3 are subject to the PM emission limits of 40 CFR 63 Subpart UUUUU and therefore, pursuant to 40 CFR §64.2(b)(1)(i), the units are exempt from the CAM Rule for PM. The three units are subject to the Acid Rain Program and therefore, pursuant to 40 CFR §64.2(b)(1)(iii) are exempt from the CAM rule for SO ₂ and NO _x .
40 CFR 82 Subpart B	The facility does not conduct motor vehicle maintenance involving CFCs on site.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: October 12, 2021
Ending Date: November 12, 2021

Point of Contact

All written comments should be addressed to the following individual and office:

Frederick Tipane
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
304/926-0499 ext. 41910
frederick.tipane@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.