

Fact Sheet



For Draft/Proposed Significant and Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant and Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on December 2, 2021.

Permit Number: **R30-02300003-2021**
Application Received: **February 3, 2023 (SM01); April 5, 2023 (MM01)**
Plant Identification Number: **03-54-023-00003**
Permittee: **Virginia Electric and Power Company**
Facility Name: **Mt. Storm Power Station**
Mailing Address: **120 Tredegar Street, Richmond, VA 23219**

Permit Action Number: *SM01 & MM01* Revised: *Draft/Proposed*

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

This modification results in the following emission changes:

Regulated Pollutants	Change in PTE (tpy)		Total Change in PTE (tpy)
	SM01	MM01	
CO	+1.01	--	+1.01
NO _x	+0.11	--	+0.11
PM	+0.002	-16.977	-16.8
PM ₁₀	+0.002	-11.982	-11.98
PM _{2.5}	+0.002	-8.179	-8.8
VOC	+0.068	--	+0.07

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 76,553 tons per year of SO₂, 9,542 tons per year of NO_x, 11,341 tons per year of CO, 2,402 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:

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 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

State Only:

NA

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

The active permits/consent orders affected by this modification are as follows:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2034D	December 3, 2010	
G60-D110	December 20, 2021	

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 revision to the Title V permit incorporates a significant modification application SM01 and a minor modification application MM01 as described below:

- SM01 is for the replacement of the Communication Tower's existing 41 hp propane-fired emergency generator (Emission Point MS79) with a new 103 hp emergency generator as permitted under Class II General Permit registration G60-D110. The new engine will retain the emission point ID of MS79.
- MM01 removes the coal unloading equipment and associated permit requirements permitted under Permit R13-2034E. The proposed project to install said equipment did not move forward and the company has requested that permit R13-2034E be rescinded and R13-2034D be reinstated. The request was granted by the WVDEP on March 14, 2023.

NOTE: *In the following discussions, "COA" means Citation of Authority and current permit means R30-02300003-2021.*

Substantial changes to R30-02300003-2021 resulting from this modification consist of the following:

- 1) **Title V Boilerplate changes.** (*these revisions are not associated with the modification application*)
 - **Condition 2.1.3.** – Revised resulting from the revised Rule 30 (45CSR30).
 - **Condition 2.11.4.** – The COA has been corrected.
 - **Condition 2.17.** – Deleted and marked as reserved resulting from the revised Rule 30.
 - **Condition 2.22.1.** – The COA has been updated to remove 45CSR38 which has been repealed.
 - **Condition 3.5.3.** – This condition was revised to update the US EPA mailing address.
 - **Condition 3.5.4.** – Revised as revised in Rule 30.
 - **Condition 3.5.7.** – Deleted and marked as reserved resulting from the revised Rule 30.

- **Condition 3.5.8.a.1.** – Deleted and marked as reserved resulting from the revised Rule 30.
- **Condition 3.5.8.a.2.** – Revised as revised in Rule 30.

2) Table of Contents

- Updated the TOC to include “Attachment A” and “Attachment B” which have been added at the end of the permit.

3) Section 1.1. Emission Units

- Updated the year installed and the design capacity for Communication Tower emergency generator.
- Revised the “Emission Unit Description” for MTST-00-CS-CNV-S1a (Emission Point ID *MS22 (T1)*) to match the description in R13-2034D in condition 5.1.2.
- Deleted the “Coal Unloading Facility *(See note at the end of the Table)” section of the table and the associated footnote at the end of the table.

4) Section 1.2. Active R13, R14, and R19 Permits

- Replaced Permit R13-2034E with R13-2034D.
- Added G60-D110.

5) Condition 3.4.1. – Added G60-D110 to the COA.

6) Section 5.0.

Section 5.0. has been revised to remove the requirements associated with R13-2034E and to reinstate the requirements from R13-2034D.

- **Condition 5.1.18. of the current permit** contains the requirements from 45CSR§2-5.1. which are applicable to the facility. These requirements were in R13-2034E in condition 4.1.13. Since R13-2034D does not have these requirements, and since these requirements are applicable to the facility and are already in condition 3.1.12., they have not been retained in Section 5.0. of the revised permit.
- **Condition 5.4.1.-** R13-2034E removed the requirement to maintain certified records as per attachments B and C of permit R13-2034 issued in 1996. Since R13-2034D has this requirement in condition 4.4.4. and the requirement has been added in 5.4.1. through this modification, Attachment A and Attachment B containing the daily and yearly throughput forms have been added to the end of the permit.
- Most of the equipment for the coal unloading facility was subject to the requirements of 40 CFR 60 Subpart Y which are contained in Section 5.0. of the current permit. The existing silos SB1 through SB4 were added to the Subpart Y requirements. These silos are not considered to be coal equipment and therefore are not subject to Subpart Y. Therefore, the Subpart Y requirements for the silos were not retained in the revised permit.

7) Section 8.0.

Section 8.0. has been revised to replace the 41 hp Communication Tower emergency generator with a new 103 hp emergency generator which has been permitted under G60-D110 General Permit Registration to the G60-D General Permit. The new generator engine is subject to the requirements of 40 CFR 60 Subpart JJJJ. The only requirement in 40 CFR 63 Subpart ZZZZ applicable to the new generator engine is that the engine must meet the requirements of 40 CFR 60 Subpart JJJJ to meet the requirements of 40 CFR 63 Subpart ZZZZ. Therefore, the 40 CFR 63 Subpart ZZZZ requirements in the current permit applicable to the replaced 41 hp engine have been deleted. Where the current

permit's conditions have been deleted, the subsequent permit conditions have been renumbered. Most of the 40 CFR 60 Subpart JJJJ requirements and General Permit G60-D requirements applicable to the new emergency generator were already contained in the current permit. Therefore, most of the revisions are to add "and G60-D110" and/or to add "Communication Tower" to the existing permit condition and/or the COA. Additionally, the following specific revisions have been made:

- **Condition 8.1.1.** – The emission limits have been revised for the new generator engine.
- **Condition 8.1.3.** – The emission standards in 40 CFR §60.4231(c) for SW-EG-1 through SW-EG-7 are currently included in parenthesis in this condition. To clarify the existing limits for these engines and to add the emission standards for the new engine "for SW-EG-1 through SW-EG-7 and 13.4 g/kw-hr of HC+ NO_x, 519 g/kw-hr of CO for Communication Tower" has been added in the parenthesis.
- **Condition 8.1.5.** – The language from 40 CFR §60.4237(c) has been added to this condition for the new engine and the COA revised.
- **Condition 8.4.3.** – The language from 40 CFR §60.4245(b) applicable to the new engine has been added to this condition.
- **40 CFR Part 60 Subpart JJJJ** - (*Standard of Performance for Stationary Spark Ignition Internal Combustion Engines*) applies to stationary spark ignition engines manufactured after July 1, 2007. The emergency generator for the Communication Tower installed in 2022, is equipped with a spark ignition engine manufactured after January 1, 2009 fueled by liquefied petroleum gas (LPG) and is rated at 103 hp. Thus, the engine is subject to the standards of this subpart and to the emission limitations of 40 CFR §§60.4233(c) and 60.4231(c) (i.e., 13.4g/kw-hr of HC+NO_x, 519g/kw-hr of CO). The engine is certified by the manufacturer to meet the emission limits of 40 CFR §60.4231(c). The permittee is not subject to the performance testing requirements unless the engine is not operated and maintained according to the manufacturer's emission-related written instructions. Therefore, the performance testing requirements are not included in the permit.

Records of conducted maintenance; all notifications submitted to comply with Subpart JJJJ, all documentation supporting any notification to demonstrate compliance; and documentation from the manufacturer that the engines are certified to meet the emission standards, and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable, will be kept and maintained pursuant to the requirements of this subpart.

- **40 CFR Part 63 Subpart ZZZZ** – (*National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*). The internal combustion engine for the emergency generator for the Communication Tower is a new emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which meet the criteria in paragraph (c)(6) of 40 CFR §63.6590. Therefore, pursuant to 40 CFR §63.6590(c) *Stationary RICE subject to Regulations under 40 CFR Part 60*, they must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63.

- 8) **Appendix C** – Although not associated with either of the modification applications, Appendix C has been updated with the latest and current Acid Rain permit.

Non-Applicability Determinations

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

- 40 CFR Subpart Y** *Standards of Performance for Coal Preparation and Processing Plants.* – The S-Sorb equipment SB1, SB2, SB3 and SB4 are not coal handling equipment.

40 CFR Part 64

Compliance Assurance Monitoring – The emergency generator engine does not meet the applicability requirements of §64.2(a)(2) or (a)(3).

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: June 13, 2023
Ending Date: July 13, 2023

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
304/414-1910
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.