Fact Sheet



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

Permit Number: **R30-02300003-2016**Application Received: **September 15, 2015**Plant Identification Number: **023-00003**

Permittee: Virginia Electric and Power Company Facility Name: Mt. Storm Power Station

Mailing Address: 5000 Dominion Boulevard, Glen Allen, VA 23060

Revised: N/A

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.

This renewal permit includes one minor modification to permit R30-02300003-2011. MM01 incorporates the requirements of Permit R13-0656A for a voluntary heat input capacity limit on the auxiliary boiler in order for the boiler to be defined as a "Limited Use" boiler per 40 CFR 63 Subpart DDDDD.

Emissions Summary

Regulated Pollutants*	Potential Emissions	2015 Actual Emissions
Carbon Monoxide (CO)	11,340.80	1828.85
Nitrogen Oxides (NO _X)	9,543.67	3890.32
Particulate Matter (PM _{2.5})	1231.0	347.61
Particulate Matter (PM ₁₀)	2,414.07	506.52
Total Particulate Matter (TSP)	2,471.53	778.10
Sulfur Dioxide (SO ₂)	205,559	4828.47
Volatile Organic Compounds (VOC)	195.53	122.35

 PM_{10} is a component of TSP.

Hazardous Air Pollutants*	Potential Emissions	2015 Actual Emissions
Hydrogen Chloride	158.02	18.65
Hydrogen Fluoride	41.15	26.44
Sulfuric Acid Mist	335.36	210.63
Total of other non-major HAP	7.82	3.78

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

*Note: The difference in potential emissions from the previous renewal permit are due to the following:

CO PTE is based on the R13-1661/R14-10 permit limits for Units 1, 2 and 3 combined with other fuel burning equipment.

NOx PTE is based on the federal consent decree limit, The previous PTE used an extrapolation of actual emissions

PM PTE is due to BART permit/consent decree limitations imposed on the coal; boilers.

The other changes are due to the increase in heat input when Units 1 and 2 were uprated during the term of the last permit. This change in Units 1 and 2, as well as the addition of equipment listed elsewhere in the permit application, accounts for the other differences in PTE

Title V Program Applicability Basis

This facility has the potential to emit 205,559 tons per year of SO_2 , 9,544 tons per year NO_X , 11,341 tons per year CO, 2,414 tons per year PM_{10} , 196 tons per year of VOC and 525 tons per year 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
45CSR38	Provisions For Determination Of Compliance With Air
	Quality Management Rules
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	TR NO _X Annual Trading Program
40 C.F.R. Part 97, Subpart BBBBB	TR NO _X Ozone Season Trading Program

40 C.F.R. Part 97, Subpart CCCCC WV Code § 22-5-4 (a) (14)

TR SO₂ Group 1 Trading Program

The Secretary can request any pertinent information such as

Page 4 of 16

annual emission inventory reporting.

State Only: 45CSR4

To Prevent And Control The Discharge Of Air Pollutants Into The Open Air Which Causes Or Contributes To An Objectionable Odor Or Odors

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 (if any)
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-C056A	January 2, 2014	
R33-3954-2017-4 (Acid Rain Permit)	December 19, 2012	Effective January 1, 2013
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 March 15, 2011 and modified on November 19, 2012, December 17, 2013, and January 2, 2015. A minor modification (MM01) application to R30-02300003-2011 was received on July 31, 2015 to incorporate the requirements of Permit R13-0656A for a voluntary heat input capacity limit on the auxiliary boiler in order for the boiler to be defined as a "Limited Use" boiler per 40 CFR 63 Subpart DDDDD. The Title V renewal application included Permit R13-2034E which was issued on June 12, 2015 for the construction of a new coal delivery and handling system. An update to the Title V renewal application was received on November 3, 2015 to include two new propane fired emergency generators not subject to NSR review. An update to the Title V renewal

application was received on July 5, 2016 to include additional Requirements from Consent Decree 03-CV-517A/03-CV-603A. This renewal permit incorporates the minor modification, the new requirements from R13-2034E, the 40 CFR 60 Subpart JJJJ requirements for the emergency generators and requirements from the consent decree. Substantial changes to the most recent version of the Title V Permit consist of the following:

1) Section 1.0 changes:

- Subsection 1.1. Revised the equipment table to reflect updates that have occurred. Revisions include:
 - Addition of the Unit 1 and 2 modification year not previously included in the permit.
 - The addition of the emergency generators SW-EG-6 and SW-EG-7.
 - R13 permit "Emission Point ID" designation and design throughput capacity for the existing S-Sorb Silos and transfer conveyor and chute were added.
 - The addition of the coal unloading facility.
 - The addition of the "Helper Cooling Tower" not previously included in the permit.
- Subsection 1.2. Revised the "Active R13, R14, and R19 Permits" table for Permits R13-0656A and R13-2034E.

2) Section 3.0 changes:

- ➤ Condition 3.1.9. This condition contained the requirements of 45CSR39 (CAIR NO_x Annual Trading Program). Since CAIR has been replaced with the Transport Rule (TR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "TR NOx Annual Trading Program" of 40 C.F.R. §97.406. The requirements of the Transport Rule have been added in Appendix A of the permit.
- ➤ Condition 3.1.10. This condition contained requirements of 45CSR40 (CAIR NO_x Ozone Season Trading Program). Since CAIR has been replaced with the Transport Rule (TR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "TR NOx Ozone Season Trading Program" of 40 C.F.R. §97.506. The requirements of the Transport Rule have been added in Appendix A of the permit.
- ➤ Condition 3.1.11. This condition contained requirements of 45CSR41 (CAIR SO₂ Trading Program). Since CAIR has been replaced with the Transport Rule (TR) trading program, the CAIR requirements have been removed from the permit. This condition now contains requirements for the "TR SO₂ Group 1 Trading Program" of 40 C.F.R. §97.606. The requirements of the Transport Rule have been added in Appendix A of the permit.
- Condition 3.1.12. This condition was previously "Reserved" and has been replaced with the subsequent condition.
- ➤ Condition 3.4.1. Permit No. R13-0656 has been added to the citation of authority.
- Condition 3.5.10. This condition was previously "Reserved" and has been deleted.
- ➤ Condition 3.7.2. 40 CFR 60 Subpart KKKK has been added as non-applicable.

3) Section 4.0 changes:

- ➤ The requirements of R13-0656A (MM01) and 40 CFR 63 Subpart DDDDD (Boiler MACT) have been added to Section 4 and the existing language has been updated as needed to match that of R13-0656A. See discussion below.
- Added language from the Federal Consent Decree that was requested in a Title V application update.
- ➤ The requirements of 40 CFR 63 Subpart UUUUU (MATS) have been added in Section 4 of the permit. See discussion below.

4) Section 5.0 changes:

- ➤ The requirements of R13-2034E for the construction of a new coal delivery and handling system have been added in Section 5. The existing language has been updated as needed to match the language of R13-2034E.
 - Condition 5.1.2. contained a table from a previous version of R13-2034 that is not included in R13-2034E. The information in the table is also in Table 1.1. Therefore the 5.1.2. table has been deleted and replaced with a requirement from R13-2034E.
 - The change in potential emissions associated with this modification are as follows:

Regulated Pollutants	Potential Emissions (ton/year)
Particulate Matter (PM _{2.5})	+ 8.19
Particulate Matter (PM ₁₀)	+ 11.99
Total Particulate Matter (TSP)	+16.99

5) Section 8.0 changes:

➤ The requirements of 40 CFR 60 Subpart JJJJ (applicable to the new emergency generators SW-EG-6 and SW-EG-7 have been added in Section 8. See discussion below.

6) Attachment A, Attachment B and Attachment C:

Attachment A and Attachment B are no longer included in Permit R13-2034E and therefore have been deleted. Attachment C has been relabelled as Attachment A

7) Appendix A, D and E:

- The CAIR Permit Application in Appendix A has been replaced with the Transport Rule (TR) Requirements.
- The Class II Emergency Generator General Permit G60-C and G60-C056A Registration has been moved to Appendix D and the Federal Consent Decree has been moved to Appendix E

- ❖ Minor Modification MM01/ 40 C.F.R. 63 Subpart DDDDD MM01 incorporates the requirements of Permit R13-0656A which incorporates voluntary heat input capacity limits on the auxiliary boiler (MTST-00-AB-STG-1) in order to meet the definition of a "Limited Use" boiler per 40 CFR 63 Subpart DDDDD. The Requirements of Subpart DDDDD for "Limited Use" boilers have also been incorporated into the Title V permit. The requirements of R13-0656A and Subpart DDDDD for the Auxiliary boiler have been incorporated in Section 4 of the permit.
 - ➤ The initial compliance date for MTST-00-AB-STG-1was January 31, 2016.
 - The requirement to conduct an initial tune-up of MTST-00-AB-STG-1 by January 31, 2016 (i.e., R13-0656A, 4.1.1.e. and 40 CFR §63.7510(e)) has been satisfied and therefore not included in this renewal.
 - The requirement to submit the "Notification of Compliance Status" containing results of the initial compliance demonstration (i.e., R13-0656A, 4.5.1. and 40 CFR§63.7530(f)) has been satisfied and therefore not included in this renewal.
 - > The change in potential emissions associated with this minor modification are as follows:

Regulated Pollutants	Potential Emissions (ton/year)
Carbon Monoxide (CO)	-1.41
Nitrogen Oxides (NO _X)	-6.77
Particulate Matter (PM _{2.5})	- 0.07
Particulate Matter (PM ₁₀)	-0.28
Total Particulate Matter (TSP)	-0.57
Sulfur Dioxide (SO ₂)	-12.03
Volatile Organic Compounds (VOC)	-0.05
Total HAPS	-0.01

- ❖ 40 C.F.R. 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.
 - The Mt Storm Power Station is a major source of HAPs because it has potential emissions in excess of 25 tpy for total HAPs and/or potential emissions in excess of 10 tpy for any individual HAP. Therefore, 40 C.F.R. Part 63, Subpart DDDDD potentially applies to Unit 1, Unit 2 and Unit 3 steam generators and the auxiliary boiler. The Unit 1, Unit 2 and Unit 3 steam generators are not subject to the Boiler MACT regulation per 40 C.F.R. §63.7491(a) because they are electric utility steam generating units (EGUs) covered by Subpart UUUUU of Part 63 (see discussion below below). The non-EGU auxiliary boiler is considered an existing affected unit under Subpart DDDDD because construction commenced on the unit prior to June 4, 2010 and it has never been reconstructed. It should be noted that the Mt. Storm Power Station has submitted a timely initial notification to WVDEP in accordance with 40 C.F.R §§ 63.7545(b) and 63.9(b) indicating that the auxiliary boiler is subject to 40 C.F.R. 63 Subpart DDDDD.

The auxiliary boiler is an oil-fired non-EGU boiler. The boiler is used for heating, startup, and shutdown purposes. The nominal design heat input of the boiler is 150 mmBtu/hr. Permit R13-0656A, condition 4.1.1.a., limits the annual capacity of MTST-00-AB-STG-1 to no more than 10

percent by limiting the annual average heat input to 131,400 MMBtu per year. The maximum fuel rate is limited to 974,112 gallons of fuel oil per year by condition 4.1.1.d. of R13-0656A. According to the definition in §63.7575, a *Limited-use boiler or process heater* means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels and has a federally enforceable average annual capacity factor of no more than 10 percent. The term *Annual capacity factor* means the ratio between the actual heat input to a boiler or process heater from the fuels burned during a calendar year and the potential heat input to the boiler or process heater had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity. Since the boiler has a federally enforceable operating limitation of 10 percent, it meets the definition of a Limited-use boiler for Subpart DDDDD and falls in that subcategory in §63.7499(o).

Since the auxiliary boiler is existing, the compliance date was January 31, 2016, according to §63.7495(b). See MM01 bullet above for initial compliance discussion.

❖ 40 C.F.R. 63 Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coaland Oil-Fired Electric Utility Steam Generating Units

This regulation, also known as the "Utility Mercury and Air Toxics (MATS)" rule, applies to coaland oil-fired EGUs as defined in §63.10042 of 40 C.F.R. Part 63. The Utility MATS rule establishes national emission limitations and work practice standards for mercury, acid gases, and filterable particulate matter, as well as requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. Existing affected sources must comply with the requirements of Subpart UUUUU no later than April 16, 2015 (cf. §63.9984(b)). However, in accordance with §64.9984(f), compliance demonstration by conducting the required performance tests and other activities must be completed no later than 180 days after the compliance date.

The coal-fired Unit 1, Unit 2, and Unit 3 steam generators are existing EGUs as defined in §63.9982(d), and do not meet any of the exemption criteria in §63.9983. All three steam generators primarily combust coal with a heating value greater than 8,300 Btu/lb. The units are also capable of combusting fuel oil as a secondary fuel for startup, shutdown, and for flame stabilization. All three units meet the criterion of §63.9990(a)(1) for units combusting coal with a heating value greater than 8,300 Btu/lb, and as such do not combust low rank virgin coal.

<u>Compliance Approach</u> - The permittee has conducted the initial compliance demonstration and submitted the results of the performance testing to DAQ. The test results are briefly discussed below for each pollutant. Additionally, the required NOCS has been submitted.

• Filterable Particulate Matter (PM)

The permittee has elected to comply with the 0.030 lb/MMBtu filterable particulate matter (PM) limitation (rather than Total non-Hg HAP metals, or Individual HAP metals). The initial performance testing was conducted for Units 1 and 2 using MATS modified Method 5 in July of 2015 and for Unit 3 in April and May of 2015 using a certified PM CEMS resulting in 0.014 lb/MMBtu for Units 1 and 2 and 0.013 lb/MMBtu for Unit 3. Initial and ongoing compliance has been previously demonstrated through quarterly stack tests for Unit 1 and Unit 2 with performance tests conducted in the third and fourth quarter of 2015. During testing on December 8-12, 2015 using Method 5 as modified by the MATS Rule, a new initial MATS correlation test on the Unit 1 and 2 common stack certified PM CEMS was successfully conducted. As a result, in accordance with 40 CFR §63.10010(i), compliance will be demonstrated through the certified PM CEMS at the common stack. Continuous compliance for Unit 3 will also be demonstrated through the certified PM CEMS.

• Sulfur Dioxide (SO₂)

The permittee has elected to comply with the 0.20 lb/MMBtu sulfur dioxide (SO₂) limitation (rather than HCl) using SO₂ CEMS (which is the only compliance method for SO₂ as provided in Item #1 of Table 2 to Subpart UUUUU). The permittee currently operates an SO₂ CEMS in accordance with 40 CFR Part 75. The initial performance testing was conducted in May of 2015 for Units 1 and 2 and in April and July of 2015 for Unit 3 resulting in 0.142 lb/MMBtu for Units 1 and 2 and 0.062 lb/MMBtu for Unit 3. Continuous compliance will be demonstrated using the SO₂ CEMS.

Mercury (Hg)

The permittee has elected to comply with the 1.2 lb/TBtu mercury (Hg) limitation utilizing a sorbent trap monitoring system. The initial performance testing was conducted in August and September of 2015 for all three Units resulting in 0.4 lb/TBtu for Unit 1, 0.4 lb/TBtu for Unit 2, and 1.0 lb/TBtu for Unit 3. Continuous compliance will be demonstrated using the sorbent trap monitoring system.

- Work Practice Standard for Tune-up of Burner & Combustion Controls

 The permittee will conduct a tune-up of the EGU burner and combustion controls at least each
 36 calendar months as specified in 40 C.F.R. §63.10021(e).
- Work Practice Standard for Startup & Shutdown

The permittee will operate all continuous monitoring systems for the units during periods of startup and shutdown as those terms are defined in 40 C.F.R. §63.10042. (The Mt. Storm Power Station plans to utilize paragraph (1) of the start-up definition in §63.10042 for all three units). During startup of a unit, clean fuel (defined in §63.10042) must be used for ignition. Once coal is fired, all of the applicable control technologies must be engaged. During shutdown of a unit, the permittee must operate all applicable control technologies while firing coal. The permittee must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown. All applicable requirements in Items #3 and #4 of Table 3 to Subpart UUUUU will be adhered to.

- ➤ The applicable requirements for an EGU utilizing PM CEMS, SO₂ CEMS, and a sorbent trap monitoring system have been included in Section 4 of the permit. The initial compliance demonstration has been completed and the NOCS has been submitted therefore these requirements are not included in the permit. Although continuous compliance is being demonstrated with the use of CEMS and a sorbent trap monitoring system, quarterly testing requirements have been included in the permit as an option for compliance as requested by the permittee.
 - The permittee has not indicated the desire to qualify for LEE status and therefore the LEE requirements have not been included in the permit
 - A PM continuous parametric monitoring system (CPMS) is not being utilized, therefore the PM CPMS requirements have not been included in the permit.
 - The permittee has not indicated the use of emission averaging, therefore the emission averaging requirements are not included in the permit.
 - The permittee has not indicated that the facility is required to make corrections for stack gas moisture, therefore stack gas moisture requirements have not been included in the permit.
 - Since the permittee has elected to comply with the alternative SO₂ limit instead of HCl, and is
 not subject to an HF limit, requirements pertaining to HCl and HF are not included in the
 permit.

- The permittee has elected to comply with the PM limit as opposed to total non-Hg HAP
 metals or Individual HAP metals, therefore requirements pertaining to non-Hg HAP metals or
 Individual HAP metals are not included in the permit.
- ❖ 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 generators SW-EG-6 and SW-EG-7 installed in 2015 are equipped with spark ignition engines manufactured after July 1, 2009 that use liquefied petroleum gas (LPG) and are rated at 227 hp. Thus, the engines will be subject to the standards of this subpart and to the emission limitations of 40 CFR §60.4231(c) (i.e., 3.8g/kw-hr of HC+NOx, 6.5g/kw-hr of CO). The engines are 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 engines are 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 this subpart JJJJ and 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 90, 1048, 1054, and 1060, as applicable will be kept and maintained.
- ❖ 40 CFR Part 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). The internal combustion engines for the emergency generators SW-EG-6 and SW-EG-7 are 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.

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 Jet 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 The existing Title V permit contains monitoring that meets the

definition of "continuous compliance demonstration method. Therefore, in accordance with 40 CFR §64.2(b)(1)(vi), this facility is

exempt from the requirements of 40 CFR Part 64.

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: August 2, 2016 Ending Date: September 1, 2016

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

Charleston, ** * 25501

Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

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)

Comments were received from Ms. Paula A Hamel of Dominion Resource Services, Inc. on August 31, 2016. The following are the comments and responses outlining any changes to the draft permit:

Comment 1:

We would like the DAQ to consider removing the Federal Consent Decree as an attachment to the permit, currently Appendix E to the permit. Our recent application to incorporate the remaining decree requirements that are ongoing in nature was intended to accomplish that. We appreciate the DAQ's actions in that regard but also believe that removal of the decree as an appendix to the Title V

permit will facilitate the "Conditional Termination of Enforcement through Consent Decree" provisions found in Paragraph 199 of the decree. We intend to petition the court in accordance with that provision as soon as all affected Title V permits are issued with the ongoing decree requirements incorporated.

Response:

The DAQ has taken under consideration the removal of the Consent Decree from Appendix E. Until the Consent Decree is terminated the requirements of the Decree are still applicable. Since removal of the Consent Decree from Appendix E of the permit will not affect its applicability and since requirements from the Consent Decree have been included in Section 4 of the permit, the DAQ concurs with your recommendation to remove it from Appendix E. Therefore, Appendix E has been removed from the draft permit.

Comment 2:

Our remaining comments are largely related to the 40 C.F.R. Part 63 Subpart UUUUU provisions and are intended to provide clarity in the permit as well as allow for future regulatory revisions without creating conflicts between the permit and the underlying requirements. Those comments are enclosed in redline/strikeout format with several marginal notations.

Response:

The majority of the redline/strikeout comments were in effect a replacement of the regulation language with the citation of the regulation section which is incorporation by reference (IBR) of the regulation. There are instances when IBR is an appropriate tool. However, in general it is not an acceptable practice that is approvable by the USEPA for the wholesale incorporation of applicable requirements even though as you have stated, it could allow for future regulatory revisions without creating conflicts between the permit and the underlying requirements. Therefore the request for such changes have not been granted and the permit will not be revised with IBR unless there is an extenuating circumstance.

Some of your comments were for language changes that would clarify the requirement or add an alternative option allowed by the regulation. Those revisions have been deemed to be appropriate and have been made using the language from 40 CFR Subpart UUUUU and are outlined below. Any additional comments to a particular condition are also included.

• Condition 4.1.42. – Requested language revision: If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory, for filterable particulate matter (PM), you must either meet the emission limit in Table 2 of Subpart UUUUU of 0.030 lb/MMBtu or 0.30 lb/MWh, by collecting a minimum of 1 dscm per run according to applicable test methods m Table 5 to Subpart UUUUU, or, install, certify, and maintain a PM CEMS. Your EGU may pursue the low emitting EGU (LEE) compliance option if it meets the requirements §63.10005(h) For LEE emissions testing for total PM, the required minimum sampling volume must be increased nominally by a factor of two. (Alternative language was suggested the included IBR)

Revised Language: If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory, for filterable particulate matter (PM), you must meet the emission limit in Table 2 of Subpart UUUUU of 0.030 lb/MMBtu or 0.30 lb/MWh, by collecting a minimum of 1 dscm per run according to applicable test methods in Table 5 to Subpart UUUUU or

- a. Install, certify, operate, and maintain a PM CEMS using Performance Specification 11 at Appendix B to 40 CFR Part 60 and Procedure 2 at Appendix F to 40 CFR Part 60.
- b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems using 40 CFR Part 75 and 40 CFR §63.10010(a), (b), (c), and (d).
- c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/MMBtu or lb/MWh emissions rates using Method 19 F-factor methodology at Appendix A-7 to 40 CFR Part 60 or calculate using mass emissions rate and gross output data (see 40 CFR §63.10007(e)).

Your EGU may pursue the low emitting EGU (LEE) compliance option if it meets the requirements of 40 CFR §63.10005(h). For LEE emissions testing for total PM, the required minimum sampling volume must be increased nominally by a factor of two.

Also, "Table 5, Item #1" has been added to the citation of authority.

• <u>Condition 4.1.43.</u> –Requested language revision: If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory, and you are using a for-sulfur dioxide (S02) <u>CEMS as an alternative HCl monitoring method</u>, you must meet the emission limit 0.20 lb/MMBtu or 1.5 lb/MWh, using SO₂ <u>CEMS according to in accordance with the</u> applicable methods in Table 5 and procedures in Table 7 to 40 C.F. R. 63 Subpart UUUUU. (Alternative language was suggested that included IBR)

Revised Language: If your existing EGU is in the coal-fired unit not low rank virgin coal subcategory complying with the for sulfur dioxide (SO₂) limit in lieu of the hydrogen chloride (HCL) limit, you must meet the emission limit 0.20 lb/MMBtu or 1.5 lb/MWh, using SO₂ CEMS according to applicable methods in Table 5 and procedures in Table 7 to 40 C.F.R. 63 Subpart UUUUU.

• <u>Condition 4.1.44.</u> – For this condition in addition to the suggested language revision, the following comment was included regarding 4.1.44.a.:

This, is not correct, you cannot use LEE testing to meet the stated emission limit. An EGU only qualifies for LEE status if the emissions are less than 10% of the Table 2 emission limit or 29 or fewer pounds per year. If an EGU cannot meet LEE requirements Hg CEMS or a sorbent trap system must be used. The 30 day LEE testing can only be used if the EGU meets the LEE requirement in 63.10005(h)(1)(ii).

Requested language revision: If your <u>existing</u> EGU is in the coal-fired unit not low rank virgin coal subcategory, for mercury (Hg), you must meet the emission limit <u>in Table 2 to Subpart UUUUU of</u> 1.2 lb/TBtu, or 0.013 lb/GWh using <u>either of</u> the following.

- a. Lee Testing for 30 days per Table 2 to Subpart UUUUU using applicable methods in Table 5 to Subpart UUUUU, or
- b. a. Hg CEMS or sorbent trap monitoring system only, using applicable methods in Table 5 and procedures m Table 7 to Subpart UUUUU.

b. Your EGU may pursue the low emitting EGU (LEE) compliance option if it meets the requirements of 40 C.F.R. §63.10005(h).

(Alternative language was suggested that included IBR)

Revised Language: If your <u>existing</u> EGU is in the coal-fired unit not low rank virgin coal subcategory, for mercury (Hg), you must meet the emission limit <u>in Table 2 to Subpart UUUUU of</u> 1.2 lb/TBtu, or 0.013 lb/GWh using <u>either of</u> the following <u>as appropriate</u>:

- a. LEE Testing for 30 days with a sampling period consistent with that given in section 5.2.1 of

 Appendix A to 40 CFR 63 Subpart UUUUU per Method 30B at Appendix A-8 to 40 CFR part

 60 per Table 2 to Subpart UUUUU using applicable methods in Table 5 to Subpart UUUUU, or
- b. Hg CEMS or
- c. Sorbent trap monitoring system only, using applicable methods in Table 5 and procedures in Table 7 to Subpart UUUUU.

Your EGU may pursue the low emitting EGU (LEE) compliance option if it meets the requirements of 40 CFR §63.10005(h).

<u>Condition 4.1.45.</u> – Language was suggested that included IBR and therefore no revisions have been made.

• Condition 4.1.46. – Comment

As this is written it only allows the option to use startup definition 1. There is no option to use startup definition 2. Condition 4.1.46. should read "During EGU startup you must comply with the applicable work practice standards in Table 3 to Subpart UUUUU." Conditions. a, c., and d should be deleted. NOTE: there was no 4.1.46 b in the publication draft

Response - This was intended to only include the requirements for using startup definition 1 based on the submitted Notice of Compliance Status (NOCS) report indicating that the facility will use startup definition 1 for compliance. The language has been revised as follows: <u>During EGU startup you must comply with the following applicable work practice standards in Table 3 to Subpart UUUUU. You have the option of complying using either of the following work practice standards:</u>

Conditions a., c., and d. have not been deleted. They have been re-designated as a., b., and c.

- <u>Condition 4.1.47.</u> Language was suggested that included IBR and therefore no revisions have been made.
- <u>Condition 4.2.14.</u> Language was suggested that included IBR and therefore no revisions have been made.
- <u>Condition 4.2.15.</u> Language was suggested that included IBR and therefore no revisions have been made
- <u>Condition 4.2.16.(3)</u> Language was suggested that included IBR and therefore no revisions have been made.
- Condition 4.2.17. Requested language revision: If you use a Hg CEMS or a sorbent trap monitoring system, you must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with appendix Appendix A to 40 CFR Subpart UUUUU. You must calculate and record a 30 (or, if alternate emissions averaging is used, 90) boiler operating day rolling average Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average emission rate, must be calculated according to section 6.2 of appendix Appendix A to the subpart, is the average of all of the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90) boiler operating days Subpart UUUUU. Section 7.1.4.3 of appendix Appendix A to 40 CFR Subpart UUUUU explains how to reduce sorbent trap monitoring system data to an hourly basis.

Revised Language - The language of this condition is that of 40 CFR §63.10010(g) therefore the basic language has not been revised. "Appendix" has been capitalized, "the subpart" has been replaced with "40 CFR 63 Subpart UUUUU" and "40 CFR Subpart UUUUU" has been replaced with "40 CFR 63 Subpart UUUUU" where "63" was previously omitted.

• <u>Condition 4.2.18.</u> – Language was suggested that included IBR and therefore no revisions have been made with the exception that the comment included removing "Table 1" from the condition and replacing "this Subpart" with "Subpart UUUUU."

Revised Language – Since this language is that of 40 CFR §63.10010(i), the only revisions made include the deletion of Table 1 since it is only applicable to new EGUs; the replacement of "this Subpart" with "40 CFR 63 Subpart UUUUU;" also "paragraphs (i)(1) through (5) of this condition" has been revised to "paragraphs (1) through (5) of this condition" since there is no sub section (i).

- <u>Condition 4.2.22.</u> Language was suggested that included IBR and therefore no revisions have been made.
- <u>Condition 4.3.4.</u> Language was suggested that included IBR and therefore no revisions have been made.
- <u>Condition 4.3.6.</u> In the first sentence "(or, if applicable. 90-) has been added as requested and as it appears in 40 CFR §63.10007(a)(1).
- Condition 4.4.14. As requested, "For an EGU that qualifies as an LEE under §63.10005(h), you must keep annual records that document that your emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year." has been added as 4.4.14.(3) since it is part of 40 CFR §63.10032(d). The citation of authority has also been revised to remove "(1) and (2)" as requested.

• Condition 4.4.15. – Comment

Please add provisions relating to startup definition (2) as an allowable compliance option.

Response - As mentioned previously, only the requirements for using startup definition 1 were include based on the submitted Notice of Compliance Status (NOCS) report. However, the requirements of 40 CFR $\S63.10032(f)(2)$ have been added to this condition as requested. The citation of authority has been revised to remove "and (f)(1)."

- <u>Condition 4.5.11.</u> Language was suggested that included IBR and therefore no revisions have been made.
- <u>Condition 4.5.14.</u> Language was suggested that included IBR and therefore no revisions have been made
- <u>Condition 4.5.15.</u> Language was suggested that included IBR however, as stated in the comment "some of these requirements are in the past" and therefore the condition has been revised to remove the obsolete requirements.

Revised Language -4.1.15.(1) and (2) are obsolete as they have been already satisfied. Therefore they have been deleted and the subsequent conditions (3), (4) and (5) have been renumbered as (1), (2) and (3). The citation of authority has been revised to reflect the change

<u>Condition 4.5.17.</u> – Language was suggested that included IBR and therefore no revisions have been made.

• <u>Condition 7.1.7.</u> – Comment

This is an example of changing underlying requirements. We believe a better way to avoid future conflicts between the Title V permit and changing regulatory requirements is through citation, for example: "Compliance with the applicable daily average PM emissions limit is determined in accordance with §60.48Da(f)"

Response – This condition has been updated with the revised language of 40 CFR §60.48Da(f) as requested through your mark-up of the condition language. The example IBR language has not been used.

Comment 3:

Finally, we also ask the DAQ to add some wording regarding compliance with the planned coal delivery project. Since that project is not yet complete and operational, we ask that wording be added to clarify that compliance with those specific applicable requirements is not required unless

and until those portions of the facility commence operation. That suggested language is also included in the enclosed redline/strikeout comments.

Response:

Although some of the requirements in the permit pertain to the equipment not yet installed, there would not be an issue with certifying compliance by simply stating that the equipment is not yet installed. However, as an alternative to adding language (which would become obsolete) in the body if the permit, "*(See note at the end of the Table)" has been added to the "Coal Unloading Facility" title in the Table 1.1 equipment table and the following has been added at the end of the table: "* Note: The "Coal Unloading Facility" section of this table contains equipment to be installed in the near future. The Requirements in Section 5 of the permit applicable to the future equipment will become effective upon startup."