Fact Sheet

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

Permit Number: R30-09900081-2018
Application Received: November 2, 2017
Plant Identification Number: 03-54-09900081
Permittee: Appalachian Power Company
Facility Name: Ceredo Generating Station
Mailing Address: 1 Riverside Plaza, Columbus, OH 43215-2373

Physical Location: Ceredo, Wayne County, West Virginia
UTM Coordinates: 365.97 km Easting • 4247.45 km Northing • Zone 17
Directions: Take Rte. 52 exit of I-64 and travel south for a short distance. Turn left onto Airport Road until you reach the Huntington Testing Building. Turn left to cross the railroad tracks and then turn immediately right onto Walker Branch Road. Travel 0.8 miles and then turn right at the 3-way stop sign. Travel approximately 1.0 miles and the site is on the left.

Facility Description
Ceredo Generating Station is a 510 megawatt (MW nominal rating) peaking power plant. The facility consists of six identical natural gas-fired turbines (Emission Unit ID# 1E - 6E), and a single natural gas-fired fuel gas heater (Emission Unit ID# 7E). The operation of the gas turbines is simple-cycle. Each turbine is a General Electric Model MS 7001EA/PG7121(EA) with a nominal output of 85 MW and a maximum heat input of approximately 1,215 MMBtu/hr HHV. The normal operation of the turbines is between 80% and 100% full load. The turbines are equipped with dry low-NOx (DLN) combustors (9ppm of NOx) and CO oxidation catalysts. The turbines combust only natural gas. A single fuel gas heater is generally operated concurrently with the gas turbines. The heater is natural gas-fired, with a heat input capacity of approximately 14.2 MMBtu/hr.
Emissions Summary

Plantwide Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Potential Emissions</th>
<th>2016 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>240.2</td>
<td>21.71</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>245.3</td>
<td>19.69</td>
</tr>
<tr>
<td>Particulate Matter (PM_{2.5})</td>
<td>N/A</td>
<td>7.84</td>
</tr>
<tr>
<td>Particulate Matter (PM_{10})</td>
<td>83.3</td>
<td>7.84</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>83.3</td>
<td>8.44</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO2)</td>
<td>5.0</td>
<td>0.39</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>13.6</td>
<td>1.39</td>
</tr>
<tr>
<td>Hazardous Air Pollutants*</td>
<td>7.4</td>
<td>0.51</td>
</tr>
</tbody>
</table>

*Some of the above HAPs may be counted as PM or VOCs. None of the HAPs are emitted at major source levels.*

Title V Program Applicability Basis

This facility has the potential to emit 240 tons per year of CO and 245 tons per year of NOx. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Appalachian Power Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30. This facility is also subject to 40CFR60 (NSPS) requirements, as well as Title IV (Acid Rain) requirements, and is therefore 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
- 45CSR6
- 45CSR10
- 45CSR11
- 45CSR13
- 45CSR16
- 45CSR30
- 45CSR33
- WV Code § 22-5-4 (a) (14)
- 40 CFR 60 Subpart Dc
- 40 CFR 60 Subpart GG
- 40 CFR Part 61
- 40 CFR 64
- 40 CFR 72
- 40 CFR 73

PM limits for Indirect Heat Exchangers
Open burning prohibited
SO\textsubscript{2} limits
Standby plans for emergency episodes
Construction Permits
New Source Performance Standards
Operating permit requirement
Acid Rain Provisions and Permits
The Secretary can request any pertinent information such as annual emission inventory reporting
Standards of Performance for Small Industrial -Commercial-Institutional Steam Generating Units
Performance Standards for Stationary Gas Turbines
Asbestos inspection and removal
Compliance Assurance Monitoring (CAM)
Permits Regulations.
Sulfur Dioxide Allowance System Permits Regulation.
<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (If any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R13-2382D</td>
<td>April 14, 2016</td>
<td></td>
</tr>
<tr>
<td>R33-55276-2020-4 Phase II Acid Rain Permit</td>
<td>December 14, 2015</td>
<td></td>
</tr>
</tbody>
</table>

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.

Determinations and Justifications
This is the third permit renewal for this facility. The following changes have been made since the most recent permit was issued:

**Title V Boilerplate changes:** Conditions 3.5.3., 3.5.5. and 3.5.6. were changed to require electronic submittal of reports to the WV DAQ and to the USEPA.

**Other changes:**
Condition 3.1.9. - This condition contained the requirements of 45CSR39 (CAIR NOX Annual Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR NOX Annual Trading Program" of 40 CFR §97.406. The requirements of the Transport Rule have been added in Appendix B of the permit.

Condition 3.1.10. - This condition contained requirements of 45CSR40 (CAIR NOX Ozone Season Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR NOX Ozone Season Group 2 Trading Program" of 40 CFR §97.806. The requirements of the Transport Rule have been added in Appendix B of the permit.
Condition 3.1.11. - This condition contained requirements of 45CSR41 (CAIR SO₂ Trading Program). CAIR has been replaced with the Transport Rule (TR) trading program, therefore the CAIR requirements have been removed from the permit, including Appendix A. This condition now contains requirements for the "TR SO₂ Group 1 Trading Program" of 40 CFR §97.606. The requirements of the Transport Rule have been added in Appendix B of the permit.

Condition 4.3.1. referenced a section 6.6.2., however there is no section 6.6.2. in the permit. The reference was corrected to section 4.2.3.a., b., c., and d.

Non-Applicability Determinations
The following requirements have been determined not to be applicable to the subject facility due to the following:

None.

Request for Variances or Alternatives
Requirement 4.2.2. includes a custom schedule for monitoring of nitrogen and sulfur content of fuel (natural gas) burned in six turbines. The change was based on approval letters from EPA: Judith Katz, "Re: Request for Custom Fuel Monitoring Schedule under Subpart GG of NSPS" received on May 11, 2001, and Conniesue B. Oldham received on September 19, 2002.

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

Comment Period
Beginning Date: Friday, May 25, 2018
Ending Date: Monday, June 25, 2018

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

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@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)
No comments received.