West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

Permit Number: **R30-01700003-2020**Application Received: **January 21, 2020**Plant Identification Number: **017-00003**

Permittee: **Dominion Energy Transmission, Inc.** Facility Name: **L. L. Tonkin Compressor Station**

Mailing Address: 925 White Oaks Blvd; Bridgeport, WV 26330

Physical Location: West Union, Doddridge County, West Virginia

UTM Coordinates: 518.82 km Easting • 4351.18 km Northing • Zone 17

Directions: Take Route 50 east from Parkersburg. After approximately 45 miles take

West Union Exit, Route 18 North. Go approximately 3.5 miles – L. L.

Tonkin station is on the left.

Facility Description

The L. L. Tonkin Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922.

8.63

Emissions Summary

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions	2018 Actual Emissions	
Carbon Monoxide (CO)	119.8	30.06	
Nitrogen Oxides (NO _X)	60.4	32.52	
Particulate Matter (PM _{2.5})	10.6	5.14	
Particulate Matter (PM ₁₀)	10.6	5.14	
Total Particulate Matter (TSP)	10.6	5.14	
Sulfur Dioxide (SO ₂)	0.7	0.32	

18.5

 PM_{10} is a component of TSP.

Volatile Organic Compounds (VOC)

Hazardous Air Pollutants	Potential Emissions	2018 Actual Emissions
Acetaldehyde	0.03	0.01
Acrolein	0.07	<0.01
Benzene	0.01	<0.01
Ethylbenzene	0.12	0.01
Formaldehyde	1.15	0.99
Hexane	0.02	0.01
Toluene	0.04	0.04
Xylene	0.02	0.02

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

Title V Program Applicability Basis

This facility has the potential to emit 119.8 TPY of CO. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Energy Transmission, Inc. 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 Particulate Air Pollution from Combustion

of Fuel in Indirect Heat Exchangers.

45CSR6 Open burning prohibited.

45CSR11 Standby plans for emergency episodes.

	45CSR13	NSR permits.
	45CSR16	Standards of Performance for New
		Stationary Sources Pursuant to 40 C.F.R.
		Part 60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs.
	40 C.F.R. 60 Subpart GG	Turbine NSPS
	40 C.F.R. 60 Subpart JJJJ	SI RICE NSPS
	40 C.F.R. 60 Subpart OOOOa	Crude Oil and Natural Gas NSPS
	40 C.F.R. 60 Subpart KKKK	Stationary Combustion Turbines NSPS
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63 Subpart ZZZZ	RICE MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Fugitive Particulate Matter

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	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-1077B	February 9, 2017	

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

Equipment Removed

The following equipment has been removed from the facility and was not included with this renewal:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
002-011	AUX01	Reciprocating Engine/Auxiliary Generator; Cummins GTA-743	1989	169 HP	N/A
TK03	TK03	Horizontal Aboveground Storage Tank – Motor Oil	1989	500 - gallon	N/A

¹Section 5.0 of the previous permit, which contained RICE MACT requirements for this generator, was no longer necessary, and it was not included with this renewal.

40 CFR 60 Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015.

This facility is subject to 40CFR60, Subpart OOOOa for fugitive emission components. As stated in 40CFR§60.5365a(j), the collection of fugitive emissions components at a compressor station, as defined in 40CFR§60.5430a, is an affected facility. For purposes of 40CFR§60.5397a, a "modification" to a compressor station occurs when an additional compressor is installed at a compressor station. The turbines which triggered applicability to 40CFR60, Subpart OOOOa for fugitive emissions components were permitted under R13-1077A, issued on March 26, 2015 and incorporated into the R30-0170003-2015 renewal permit on August 17, 2015. The turbines were installed in 2016, which is after the Subpart OOOOa applicability date of September 18, 2015. No permitting action was done to address 40CFR60, Subpart OOOOa in the Title V permit because Subpart OOOOa was finalized after the renewal was issued in 2015. Therefore 40CFR60, Subpart OOOOa requirements will be added with this renewal. There are no centrifugal compressors using wet seals at this facility.

The L. L. Tonkin Compressor Station has fugitive components at the facility, and they conduct Quarterly leak detection and repair (LDAR) surveys to detect and repair leaks. The applicable requirements from 40CFR60 Subpart OOOOa for fugitive emission components were added as new permit section 7.0.

Section 6.0: 40CFR60, Subpart OOOOa Requirements [emission unit ID(s): fugitives]

As discussed previously, this new section was added to include the applicable portions of 40CFR60, Subpart OOOOa. These new conditions are as follows:

Permit Condition	Summary of Permit Condition	Regulatory Citation
6.1.1.	Reduce GHG and VOC Emissions: Fugitive Emissions Monitoring	45CSR16; 40 C.F.R. §60.5397a
6.1.2.	Initial Compliance	45CSR16; 40 C.F.R. §60.5410a(j)
6.1.3.	Continuous Compliance	45CSR16; 40 C.F.R. §60.5410a(h)
6.4.1.	Fugitive Emissions Records	45CSR16; 40 C.F.R. §§60.5420a(c)&(c)(15)
6.5.1.	Annual Reporting	45CSR16; 40 C.F.R. §§60.5420a(b)(1) and (7)

Additional Permit Changes

The following permit conditions were added/removed with this renewal.

- The NO_X, VOC, and CO emission limits for the turbine (001-01) that were applicable prior to the upgrade were removed from conditions 4.1.1.a.i., ii, and iv. This upgrade has been completed, and inclusion of these emission limits are no longer necessary. Permit condition 4.1.1. already included the emission limits for when the turbine upgrade was complete.
- Initial turbine performance testing requirements to demonstrate compliance with the NO_X emission limits in conditions 4.1.1.a.i. and 4.1.2.a.i. were removed from Section 4.3 with this renewal. The testing was performed for the Solar T-4500 turbine (001-01) on January 4, 2017; the letter notifying the DAQ of this completed testing was dated March 1, 2017. The testing was performed for the Solar Centaur 50 Combustion turbines (001-02 and 001-02) on October 12, 2016; the letter notifying the DAQ of this completed testing was dated December 7, 2016.
- Previous permit language from condition 4.5.1. was removed with this renewal. This condition referenced condition 4.5.1. of R13-1077B. This condition required notification of the initial startup of Combustion Turbines #2 and #3. This notification has ben received by the DAQ, therefore this language is no longer necessary.
- New condition 4.5.1 was added to address reporting of performance testing, as specified in 40CFR§60.4375(b).
- Condition 5.5.2. was added to address reporting of performance testing, as specified in 40CFR§60.4245(d).

Non-Applicability Determinations

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

- a. 40 C.F.R. 60 Subpart OOOO This subpart does not apply to the facility since the facility is a transmission facility that has tanks with potential emissions below 6 tons VOC/yr and additionally those tanks have not been constructed, modified, or reconstructed after August 23, 2011 and on or before September 18, 2015.
- b. 40 C.F.R. 63 Subpart HH This subpart does not apply to the facility since the facility is not a natural gas production facility.
- c. 40 C.F.R. 63 Subpart HHH This subpart does not apply to the facility since the facility is not a major source of HAPs.
- d. 40 C.F.R. 63 Subpart DDDDD The boilers (BLR01 and BLR02) are not subject to this subpart since the facility is not a major source of HAPs.
- e. 40 C.F.R. 63 Subpart JJJJJJ The boilers (BLR01 and BLR02) are not subject to this subpart since they are considered "gas-fired boilers" (i.e. burn only natural gas) and are exempt based on §63.11195(e).
- f. 40 C.F.R. 64 Potential pre-control device emissions from the pollutant-specific emission units are below the major source thresholds. Therefore, according to 40CFR§64.2(a), CAM is not applicable to any pollutant-specific emission units at this facility.

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: March 17, 2020 Ending Date: April 16, 2020

Point of Contact

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

Rex Compston, P.E. West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304

Phone: 304/926-0499 ext. 41252 • Fax: 304/926-0478

Rex.E.Compston@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.