West Virginia Department of Environmental Protection

Earl Ray Tomblin
Governor

Division of Air Quality

Randy C. Huffman
Cabinet Secretary

Permit to Modify

R13-1077A

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§22-5-1 et seq.) and 45 C.S.R. 13 – Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the above-referenced facility is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Issued to:

Dominion Transmission, Inc.
L.L. Tonkin Compressor Station
017-00003

William F. Durham
Director

Issued: DRAFT

This permit will supercede and replace Permit R13-1077.

Facility Location:	Tonkin Station Road West Union, Doddridge County, West Virginia
Mailing Address:	445 West Main Street Clarksburg, WV 26301
Facility Description:	Natural Gas Transmission Station
NAICS Codes:	486210
UTM Coordinates:	518.82 km Easting • 4,351.18 km Northing • Zone 17
Permit Type:	Modification
Description of Change:	This action is call for adding the SoLONO$_x$ combustion system for the existing turbine, installation of two Solar Centaur 50 Combustion Turbine that are configured to drive a natural gas compressor, one small boiler and emergency generator set.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §§22-5-14.

The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

Table of Contents

1.0. Emission Units 4
2.1. Definitions 5
2.2. Acronyms 5
2.3. Authority 5
2.4. Term and Renewal 6
2.5. Duty to Comply 6
2.6. Duty to Provide Information 6
2.7. Duty to Supplement and Correct Information 6
2.8. Administrative Update 7
2.9. Permit Modification 7
2.10 Major Permit Modification 7
2.11. Inspection and Entry 7
2.12. Emergency 7
2.13. Need to Halt or Reduce Activity Not a Defense 8
2.14. Suspension of Activities 8
2.15. Property Rights 8
2.16. Severability 8
2.17. Transferability 9
2.18. Notification Requirements 9
2.19. Credible Evidence 9

3.0. Facility-Wide Requirements 10
3.1. Limitations and Standards 10
3.2. Monitoring Requirements 10
3.3. Testing Requirements 10
3.4. Recordkeeping Requirements 11
3.5. Reporting Requirements 12

4.0. Source-Specific Requirements 14
4.1. Limitations and Standards 14
4.2. Monitoring Requirements 16
4.3. Testing Requirements 17
4.4. Recordkeeping Requirements 18
4.5. Reporting Requirements 19

CERTIFICATION OF DATA ACCURACY 20

1.0. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
001-01	TRB01	Solar T-4500 Turbine #1 w/gas compressor configuration	1989	4,417 hp	$SoLoNO_x$[1]
001-02	TRB02	Solar Centaur 50 Combustion Turbine #2 w/gas compressor configuration	2016	6,035 bhp	$SoLoNO_x$
001-03	TRB03	Solar Centaur 50 Combustion Turbine #3 w/gas compressor configuration	2016	6,035 bhp	$SoLoNO_x$
002-02	AUX02	Caterpillar CG137-12Generator Set w/ spark-ignition engine using natural gas	2016	600 bhp	Integrated Catalyst w/AFR
004-02	BLR02	Ajax WRF-1750 Boiler natural gas fired	2016	4.0 MMBtu/hr	None

$SoLoNO_x$ is Solar's combustion controls for combustion turbines for minimizing NO_x emissions.
1 – Added SoLoNOx in 2016, which does not constitute a modification under Part 60.
AFR – Air Fuel Ratio Controller

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.2. Acronyms

CAAA	Clean Air Act Amendments
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
dscm	Dry Standard Cubic Meter
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr	Pounds per Hour
LDAR	Leak Detection and Repair
M	Thousand
MACT	Maximum Achievable Control Technology
MDHI	Maximum Design Heat Input
MM	Million
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour
MMCF/hr *or* mmcf/hr	Million Cubic Feet per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter less than 2.5 µm in diameter
PM_{10}	Particulate Matter less than 10µm in diameter
Ppb	Pounds per Batch
Pph	Pounds per Hour
Ppm	Parts per Million
Ppm_V or ppmv	Parts per Million by Volume
PSD	Prevention of Significant Deterioration
Psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquids

2.3. Authority

This permit is issued in accordance with West Virginia Air Pollution Control Act W.Va. Code §§ 22-5-1. et seq. and the following Legislative Rules promulgated thereunder:

2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*;

2.4. Term and Renewal

2.4.1. This permit supersedes and replaces previously issued Permit R13-1077. This Permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any other applicable legislative rule;

2.5. Duty to Comply

2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-1077, R13-1077A, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;
[45CSR§§13-5.11 and 10.3.]

2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;

2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;

2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses, and/or approvals from other agencies; i.e., local, state, and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

2.6. Duty to Provide Information

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

2.7. Duty to Supplement and Correct Information

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

2.8. Administrative Update

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-4.]

2.9. Permit Modification

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.
[45CSR§13-5.4.]

2.10 Major Permit Modification

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.
[45CSR§13-5.1]

2.11. Inspection and Entry

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

2.12. Emergency

2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are met.

2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

2.12.5 The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

2.13. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

2.14. Suspension of Activities

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

2.15. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege.

2.16. Severability

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

2.17. Transferability

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. **[45CSR§13-10.1.]**

2.18. Notification Requirements

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

2.19. Credible Evidence

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management, and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40CFR§61.145(b) and 45CSR§34]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1] ***[State Enforceable Only]***

3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.
[45CSR§13-10.5.]

3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2.]

3.2. Monitoring Requirements

[Reserved]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly

authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4. or 45CSR§13-5.4 as applicable.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within sixty (60) days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1.; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language;
2. The result of the test for each permit or rule condition; and,
3. A statement of compliance or noncompliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports, and notifications) required by this permit recorded

in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§4. *State Enforceable Only.*]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:
Director
WVDEP
Division of Air Quality
601 57th Street
Charleston, WV 25304-2345

If to the US EPA:
Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. Operating Fee

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

4.0. Source-Specific Requirements

4.1. Limitations and Standards

4.1.1. The following conditions and requirements are specific to Combustion Turbine#1 (ID 001-01):

a. Emissions from the combustion turbine shall not exceed the following:

i. Emissions of nitrogen oxides (NO_x) shall be not be exceeded 153 ppmvd at 15 percent oxygen. Annual NO_x emissions from the turbine shall not exceed 99.00 tpy on a 12-month rolling total. Once the upgrade for the turbine has been completed, annual NO_x emissions from the turbine shall not exceed 29.16 tpy on a 12-month rolling total.
[40 CFR §60.332(a)(2)]

ii. Emissions of CO from the com**b**ustion turbine (001-01) shall not exceed 73 tons per year, on a rolling 12 month total basis.

iii. The combustion turbine shall not combust any fuel (natural gas) which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). For purposes of demonstrating compliance with this limit, the permittee shall maintain the Federal Energy Regulatory Commission (FERC) tariff limit on total sulfur content of 20 grains of sulfur or less per 100 standard cubic feet of natural gas combusted in the turbine.
[40 CFR §60.333(b), §§60.334(h) & (h)(i) and 45 CSR §10A-2.7 & §10A-3.1.b]

iv. Emissions of VOCs shall not exceed 6.1 tons per year, on a rolling 12 month total basis. Once the upgrade for the turbine has been completed, emissions of VOCs shall not exceed 1.46 tons per year, on a rolling 12 month total basis. This limit does not apply to the fugitives from the compressor.

b. The turbine shall only be fired with pipeline-quality natural gas. This condition satisfies compliance with the limitation of 45CSR§10-3.1.e.
[45CSR§10-10.3., and 45CSR§10A-3.1.b.]

c. As part of upgrading the turbine, the permittee shall install, operate, and maintain the $SoLoNO_x$ system (lean-premix combustion technology) to reduce NO_x emissions. The permittee shall maintain the turbine and $SoLoNO_x$ in accordance with the manufacturer's recommendations and tune the system

4.1.2. The following conditions and requirements are specific to Combustion Turbines #2 and #3 (ID 001-02 & 001-03):

a. Emissions from each combustion turbine shall not exceed the following:

i. Emissions of nitrogen oxides (NO_x) shall be controlled with the combustion controls when ambient temperatures are above 0^oF and the load is at or above 50%. Each turbine shall not discharge nitrogen oxides (NO_x) emissions in excess of 25 ppm at 15 percent O_2 when operating at load conditions at or above 75 percent of peak load and/or when operating temperatures are at or above 0^0F. When the operating loads of the turbine are less than 75% of peak load and/or operating temperatures are less than 0^0F, NO_x emissions rate from the turbine shall not exceed 150 ppm at 15 percent O_2. Annual NO_x emissions from each turbine shall not exceed 14.34 tpy on a 12-month rolling total. This limit applies at all times, including periods of startup, shutdown, or malfunction.
[40CFR§§60.4320(a), Table 1 to Subpart KKKK of Part 60 – Nitrogen Oxides Emission Limits for New Stationary Combustion Turbines]

ii. Emissions of CO from each combustion turbine shall not exceed 36.50 tons per year, on a rolling 12 month total basis.

iii. Emissions of SO_2 shall not exceed 0.060 lb of SO_2/MMBtu heat input. For purposes of demonstrating compliance with this limit, the permittee shall maintain the Federal Energy Regulatory Commission (FERC) tariff limit on total sulfur content of 20 grains of sulfur or less per 100 standard cubic feet of natural gas combusted in the turbines.
[40 CFR §§60.4330(a)(2) & 60.4365(a) and 40 CSR §10-]

iv. Emissions of VOC shall not exceed 1.87 tons per year, on a rolling 12 month total basis. This limit does not apply to the fugitives from the compressor.

b. Each turbine shall only be fired with pipeline-quality natural gas. This condition satisfies compliance with the limitation of 45CSR§10-3.1.e.
[45CSR§10-10.3., and 45CSR§10A-3.1.b.]

c. The permittee must operate and maintain each turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
[40 CFR §60.4333(a)]

4.1.3. The following conditions and requirements are specific to the boiler (ID #004-02):

a. NO_x emissions emitted to the atmosphere from the boiler shall not exceed 0.66tons per year on a 12 month rolling total.

b. CO emissions emitted to the atmosphere from the boiler shall not exceed 0.26 tons per year on a 12 month rolling total.

c. The boiler shall only be fired with pipeline quality natural gas. This condition satisfies compliance with the limitations of 45CSR§2-3.1., 45CSR§2-4.1.b., and 45CSR§10-3.1.e.
[45CSR§2A-3.1.a., 45CSR§10-10.3., and 45CSR§10A-3.1.b.]

d. The heater shall not be designed or constructed with a maximum design heat input in excess of 1.75MMBtu/hr. Compliance with this limit shall be through fuel usage that indicates the total amount of natural gas fuel during any 12 consecutive months is less than 15.0 MM cubic feet. Satisfying compliance with this limit demonstrates compliance with the annual emissions limits in items a and b of this condition.

4.1.4. The following conditions and requirements are specific to the internal combustion engine for the emergency generator set identified as 002-02:

a. Emissions from engine shall not exceed the following:

i. NO_x emissions from the engine shall not exceed 2.0 grams of NO_x per horsepower-hour (g/hp-hr) or 160 ppmvd at 15 percent O_2;

ii. CO emissions from engine shall not exceed 4.0 g/hp-hr or 540 ppmvd at 15 percent O_2

iii. VOC emissions from the engine shall not exceed 1.0 g/hp-hr or 86 ppmvd at 15 percent O_2. Formaldehyde is excluded from this VOC limit.
40 CFR §60.4233(e), Table 1to Subpart JJJJ of Part 60 - NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines $\geq$ 100 HP, Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines > 25 HP]

b. Compliance with the limits in Item a. shall be determined using the appropriate equations listed in 40 CFR §60.4244.

c. There is no time limit on the use of the engine in emergency situations. The engine can operate for combined non-emergency purposes, which include emergency demand response, maintenance and testing, and other non-emergency use for a maximum of 100 hours per year. Within the 100 hours per year, the engine can only operate:

i. 15 hours per year for emergency demand response. Emergency demand response is determined by the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3 or other authorized entity as determined by the Reliability Coordinator; and

ii. 50 hours per year for non-emergency use. The non-emergency situations cannot be used for peak shaving or to generate income for the facility to supply power to an electric gird or otherwise supply power as part of a financial arrangement with another entity.

The operating limits imposed in this condition are on a calendar year basis.
[40 CFR §60.4243(d)]

d. The engine shall be equipped with a non-resettable hour-meter prior to start-up.
[40 CFR §60.4237(a)]

e. The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR §60.4243(b)(2)(ii)]

f. The engine shall only be fired with pipeline quality natural gas. This condition satisfies compliance with the limitation of 45CSR§10-3.1.e.
[45CSR§10-10.3., and 45CSR§10A-3.1.b.]

4.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR§13-5.11.]

4.2. Monitoring Requirements

4.2.1. For the purpose of determining compliance with the annual limits for each combustion turbine (001-01 & 002-02), the permittee shall monitor and record the following for each calendar month:

a. Hours the turbine operated at normal conditions ($SoLoNO_x$ Mode), which is when the turbine is at or above 50% load, and the ambient temperature is above 0^0F.

b. Hours the turbine operated at low-load conditions, which is when the turbine load is less than 50% load. The time for start-up and shutdown of the turbine shall be account under this tpye of operation.

c. Hours the turbine operated at low temperature conditions, which is when the ambient temperature is less than 0^0F.

Such records shall be maintained in accordance with Condition 3.4.1. of this permit.

4.2.2. To demonstrate compliance with Condition 4.1.2, the permittee shall maintain records of the amount of natural gas consumed in the boiler 004-02 for each calendar month and calculate the 12 month rolling total of natural gas consumed by the boiler. Such records shall be maintained in accordance with Condition 3.4.1.

4.2.3. The permittee shall keep records of the hours of operation for the engine identified as 002-02. The records must document how many hours are spent for emergency operation, including what classified the operation as an emergency, and how many hours spent for non-emergency operation with corresponding reason for the non-operation. Such records shall be maintained in accordance with Condition 3.4.1. and must be in a manner to demonstrate compliance with the operating limits of Condition 4.1.4.c.
[40 CFR §60.4245(b)]

4.3. Testing Requirements

4.3.1. For the purposes of demonstrating compliance with the NO_x emission standards in Condition 4.1.1.(a)(i) and developing a 40 CFR§60.4320(a), the permittee shall conduct an initial performance test within 60 days after achieving maximum output of turbine 001-02, but no later than 180 days after initial startup. After the initial test, subsequent performance testing shall be conducted annually for turbines 001-01 and 001-02 (no more than 14 months following the previous test) unless the previous results demonstrate that the affected units achieved compliance of less than or equal to 75 percent of the NO_x emission limit (18.75 ppm @ 15% Oxygen), then the permittee may reduce the frequency of subsequent tests to once every two years (no more than 26 calendar months following the previous test) as allowed under 40 CFR §60.4340(a). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit, then the permittee must resume annual performance tests. Such testing shall be conducted in accordance with Condition 3.3.1. and 40 CFR §60.4400. Records of such testing shall be maintained in accordance with Condition 3.4.1.

4.3.2. For the purposes of demonstrating compliance with the NO_x emission standards in Condition 4.1.2.(a)(i) and 40 CFR§60.4320(a), the permittee shall conduct an initial performance test within 60 days after achieving maximum output of turbine 001-02, but no later than 180 days after initial startup. After the initial test, subsequent performance testing shall be conducted annually for turbines 001-01 and 001-02 (no more than 14 months following the previous test) unless the previous results demonstrate that the affected units achieved compliance of less than or equal to 75 percent of the NO_x emission limit (18.75 ppm @ 15% Oxygen), then the permittee may reduce the frequency of subsequent tests to once every two years (no more than 26 calendar months following the previous test) as allowed under 40 CFR §60.4340(a). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit, then the permittee must resume annual performance tests. Such testing shall be conducted in accordance with Condition 3.3.1. and 40 CFR §60.4400. Records of such testing shall be maintained in accordance with Condition 3.4.1.
[40 CFR §60.8(a), §60.4340(a), §60.4375(b), and §60.4400]

4.3.3. For the purposes of demonstrating compliance with the emission standards in Condition 4.1.4. and 40 CFR§60.4233(e), the permittee shall conduct an initial performance test within one year after initial startup. After the initial test, subsequent performance testing shall be conducted every 8,760 hours of operation or 3 years, whichever comes first. If the engine is not operational, the permittee must conduct the performance test immediately upon startup of the engine. These tests must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements of §60.8, under the specific conditions that are specified by Table 2 to Subpart JJJJ of Part 60 – Requirements for Performance Test, and in accordance with Condition

3.3.1. of this permit. Records of such testing shall be maintained in accordance with Condition 3.4.1. of this permit.
[40 CFR §60.8(a), 60.4243(b)(2(ii), and 60.4244]

4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit, and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.4.4. Compliance with the annual emission limits in 4.1.1 of this permit shall be based on a rolling 12 month total. The emissions from each turbine shall be determined monthly using the following equation:

$ME_{Px} = DLN_{Px}$* DLN hours + LL_{Px}*LL hours + LT_{Px}*LT hours

Where:

ME_{Px} = Monthly emissions of Pollutant X

DLN_{Px} = Hourly emission rate of Pollutant X during normal operation

DLN = Number of hours of normal operation in said month

LL_{Px} = Hourly emission rate of Pollutant X during low load (<50%) operation (start-up and shutdown periods)

LL = Number of hours of low load operation in said month

LT_{Px} = Hourly emission rate of Pollutant X during low temperatures (<0°F)

LT = Number of hours of low temperature operation in said month

Hourly emission rates used in the above calculation shall be based on best available data which is data collected during source specific testing, the data for specific model turbine provided or published by the manufacturer. This determination shall be performed within 30 days after the end of the calendar month and the monthly emissions shall be summed for the preceding 12 months to determine compliance with the annual limits in Condition 4.1.1.(a). Records of the monthly total and 12 month rolling totals shall be maintained in accordance with Condition 3.4.1.

4.4.5. The permittee shall maintain current and valid documentation that the natural gas consumed by the combustion turbines specifying that the maximum total sulfur content is 20 grains of sulfur or less per 100 cubic feet of natural gas. Said documentation can be purchase contracts, tariff sheets, or transportation contracts. Such records shall be maintained in accordance with Condition 3.4.1., except that these records can be maintained off-site but must be made available for inspection within 15 days of the request. By satisfying this requirement the permittee is exempted from the total sulfur monitoring requirement of §60.334(h)(1) for 001-01 and §60.4360 for 001-02 & 001-03. These records satisfy Conditions 4.1.1.b., 4.1.2.c. and 4.1.3.e.
[40 CFR §60.334(h)(3)(i) & §60.4365(a)]

4.5. Reporting Requirements

4.5.1. The permittee shall submit a notification to the Director of the initial start-up of the Combustion Turbine #2 identified as 001-02. Such notice must be submitted within 15 days after the actual date of start-up for the affected source. This notification supersedes the notification requirements of Condition 2.18.
[40 CFR §60.7(a)(3)]

CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title _____ _____
(please print or type) Name Title

Telephone No. _____ Fax No. _____

---

[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

   (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

   (ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.