Hernan Flores

From: Bobby Van Borssum <Bobby.VanBorssum@enbridge.com>
Sent: Tuesday, November 23, 2021 2:12 PM
To: Hernan Flores
Cc: Will Collins; Moe Baghernejad; Chuck Zukor
Subject: [EXTERNAL] RE: 65-0028 | 979102 | East Tennessee Natural Gas, LLC dba Station 3110 | draft construction permit for your review
Attachments: 979102-Permit.pdf; WART_Agreement Letter_2021-1122 - signed.pdf; 979102-Permit - CJZ&BVB edits.docx

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Mr. Flores,

Please see the attached signed agreement letter and draft permit comments. Please let me know if you have any questions. I would be happy to set up a conference call to discuss if you'd like.

Also, I'm assuming that the Title V application which was submitted previously is still going to be processed based off of this permit and will not require a new, separate submission. If I'm mistaken, please let me know.

Thank You,

Robert H. Van Borssum, P.E.
Engineer, Air Permitting
Safety & Reliability

ENBRIDGE
TEL: 713-627-4257 | CELL: 361-482-9241 | FAX: 713-989-8347 | Bobby.VanBorssum@Enbridge.com
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enbridge.com
Safety. Integrity. Respect.

From: Hernan Flores <Hernan.Flores@tn.gov>
Sent: Thursday, November 18, 2021 9:28 PM
To: Bobby Van Borssum <Bobby.VanBorssum@enbridge.com>
Cc: Will Collins <Will.Collins@tn.gov>; Moe Baghernejad <Moe.Baghernejad@tn.gov>
Subject: [External] 65-0028 | 979102 | East Tennessee Natural Gas, LLC dba Station 3110 | draft construction permit for your review

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I have attached a copy of Draft Construction Permit # 979102 for East Tennessee Natural Gas, LLC dba Station 3110, for your review.

Thank you for offering to review it by November 23, 2021 during our telephone conversation of November 17, 2021.

If you have any comments or questions, please contact me at your convenience. My contact information is provided below.

Sincerely,

Hernan R. Flores | Environmental Protection Specialist
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue, Nashville, TN 37243
p. 615-532-0593
Hernan.Flores@TN.gov
tn.gov/environment/permit-permits/permit-air-home.html

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Internal Customers please complete our customer satisfaction survey.

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STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE

PERMIT TO CONSTRUCT / MODIFY AIR CONTAMINANT SOURCE(S)

Permit Number: 979102

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Facility Address: 142 Clayton Howard Road, Wartburg
Morgan County

Facility Classification: Title V

Federal Requirements: 40 CFR Part 60 Subpart GG
40 CFR Part 63 Subpart ZZZZ

Facility Description: Natural Gas Pipeline Compressor Station

Permit 979102, consisting of 35 pages is hereby issued <Issuance Date>, pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit expires on <Expiration Date>. The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

Michelle W. Owenby
Technical Secretary
Tennessee Air Pollution Control Board

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

Section I – Sources Included in this Construction Permit

FACILITY DESCRIPTION			
Source Number	**Source Description**	**Status**	**Control Device/Equipment**
01	One (1) 1784 HP (@ 0.01 °F) [20.69 MMBTU/hr] Gas Turbine, and One (1) 1450 HP (@ 0.01 °F) [17.37 MMBTU/hr] Gas Turbine		None
02	One (1) Four-stroke 220 Hp, SI Natural Gas-fired Emergency Engine with 150 kW Generator		None

Section II – Permit Record

Permit Type	Description of Permit Action	Issue Date
Initial	Initial construction permit issuance	<Issuance Date>

Section III - General Permit Conditions

G1. Responsible Person

The application that was utilized in the preparation of this construction permit is dated June 1, 2021 and is signed by Robert Arnold, Director Field Operations US, the Responsible Person for the permittee. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in Appendix 1 of this permit no later than 30 days after the change. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

G2. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

G3. Submittals

Unless otherwise specified within this permit, the permittee shall submit, preferably via email and in Adobe Portable Document format (PDF), all applicable plans, checklists, certifications, notifications, test protocols, reports, and applications to the attention of the following Division Programs at the email addresses indicated in the table below:

Permitting Program	Compliance Validation Program	Field Services Program
• Notifications • Startup certifications • Applications • NSPS reports • MACT/GACT/NESHAP reports • Emission statements • Construction permit extension requests	• Test protocols • Emission test reports • Visible emission evaluation reports	• Semiannual reports • Annual compliance certifications/status reports
Division of Air Pollution Control William R. Snodgrass TN Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243 Air.Pollution.Control@tn.gov		Knoxville Environmental Field Office Division of Air Pollution Control 3711 Middlebrook Pike Knoxville, TN 37921 APC.KnoxEFO@tn.gov

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the email addresses above, the permittee may submit the information to the attention of the respective Division Programs at the mailing addresses listed above.

TAPCR 1200-03-09-.03(8)

G4. Notification of Changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification
- change in stack height or diameter
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in Appendix 2 of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

G5. Permit Transference

A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.
TAPCR 1200-03-09-.03(6)(b) and 1200-03-09-.01(1)(b)

B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in Appendix 3 of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

G6. Operating Permit Application Submittal

The permittee shall apply for a Title V operating permit within 360 days of issuance of this permit.

TAPCR 1200-03-09-.02(11)(d)1(i)(II)

G7. Temporary Operating Permit

A. This construction permit shall serve as a temporary operating permit from the date of issuance, until the Technical Secretary issues a Title V operating permit, provided the permittee submits an operating permit application within the timeframe specified in **Condition G6**.

TAPCR 1200-03-09-.02(1), 1200-03-09-.02(2), and 1200-03-09-.02(11)(d)1(i)(V)

B. If construction of the air contaminant source(s) cannot be completed and/or an operating permit application cannot be filed with the Technical Secretary by the expiration date of this permit, the permittee must submit a permit extension request 30 days prior to permit expiration.

TAPCR 1200-03-09-.02(1) and 1200-03-09-.02(3)

G8. Startup Certification for New or Modified Source(s)

Not applicable

G9. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees to the Tennessee Division of Air Pollution Control.

TAPCR 1200-03-26-.02

G10. General Recordkeeping Requirements

A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping
No later than seven days from the end of the day for which the data is required.	No later than seven days from the end of the week for which the data is required.	No later than 30 days from the end of the month for which the data is required.

B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon

request. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

G11. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

G12. Visible and Fugitive Emissions

A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

Compliance Method: When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
(b) Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts;
(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

Compliance Method: When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

Compliance Method: When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

G13. Facility-wide Limitations

Not applicable

G14. NSPS/NESHAP/MACT/GACT Standards

The following source(s) are subject to and shall comply with all applicable requirements of each NSPS/NESHAP/MACT/GACT standard as indicated in the table below, including the General Provisions identified in Appendices 8 and 9. The applicable requirements of each standard are incorporated into this permit pursuant to TAPCR 1200-03-09-.03(8).

Source	NESHAP/MACT/GACT	NSPS
01		40 CFR 60: GG
02	40 CFR 63: ZZZZ	

TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance methods are provided in the conditions in **Section V** of this permit.

G15. VOC and NO_X Emission Statement

Not Applicable

G16. Permit Supersedes Statement

This permit supersedes all previously issued permits for this/these source(s).

TAPCR 1200-03-09-.03(8)

G17. Source Testing Requirements

Not Applicable

Section IV – Federal and/or State Only Requirements

See Section V – Source Specific Permit Conditions

Section V - Source Specific Permit Conditions

Source Number	Source Description
01	Three 1,360 HP [@ ISO] [17.37 MMBtu/hr. @0.01 °F] Solar Saturn Model T-1300 natural gas fired combustion turbines used to power compressors in a pipeline natural gas compressor station

S1-1. Input Limitation(s) or Statement(s) of Design

A. The stated heat input rate of each combustion turbine is: 17.37 MMBut/hr. @0.01 °F. Should the permittee need to modify a combustion turbine(s) in a manner that increases the stated heat input rate, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.01(1)(d) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of each turbine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

B. The stated power output capacity of each combustion turbine is: 1,360 HP @ ISO. This condition is a statement of the capacity for the combustion turbine(s). Should the permittee need to modify a combustion turbine(s) in a manner that increases the stated power output capacity, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.01(1)(d) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of each turbine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

C. Only natural gas shall be used as fuel for the combustion turbines. The combustion turbines are only capable of burning this fuel. Should the permittee need to modify the combustion turbines to allow the use of a fuel other than natural gas, a construction permit or Title V modification shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the type of fuel used by the three combustion turbines. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S1-2. Production Limitation(s)

Not applicable

S1-3. Operating Hour Limitation(s)

Not applicable

S1-4. Emission Limitations

A. Particulate matter (PM) emitted from the three combustion turbines shall not exceed 0.36 pounds per hour (0.12 pounds per hour from each turbine).

TAPCR 1200-03-26-.02(6)(b) and the agreement letter dated DATE.

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S1-1.A and S1-1.C** and the use of emission factor of 6.60 E-03 pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

B. Sulfur dioxide (SO_2) emitted from the three combustion turbines shall not exceed 3.33 pounds per hour (1.11 pounds per hour from each turbine).

TAPCR 1200-03-14-.03(5), 40 CFR §60.333(b) and TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S1-1.A, S1-1.C, and F1-2**, and the use of emission factor of (0.94 x 0.068) pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

C. Carbon Monoxide (CO) emitted from the three combustion turbines shall not exceed 189.18 tons during all intervals of 12 consecutive months (63.06 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

D. Volatile organic compounds (VOC) emitted from the three combustion turbines shall not exceed 5.94 tons during all intervals of 12 consecutive months (1.98 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

E. Nitrogen oxides (NO_X) emitted from the three combustion turbines shall not exceed 116.46 tons during all intervals of 12 consecutive months (38.82 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

S1-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

Federal Requirements

F1-1. Nitrogen oxides (NO_X) emitted from the three combustion turbines shall not exceed 0.0150% by volume on a dry basis corrected to 15% oxygen.

40 CFR §60.332(a)(2) and TAPCR 1200-03-09-.03(8)

Compliance Method: Initial compliance with this limitation was demonstrated by a source test conducted on December 17, 1996. The nitrogen oxides (NO_X) concentration determined by the source test was 55.6 parts per million by volume on a dry basis (0.0056% by volume on a dry basis corrected to 15% oxygen). The Division accepted the results of the source test by letter dated April 28, 1997 (see Appendix 11).

Consistent with the provisions of the memorandum of August 14, 1987 by John B. Rasnic of EPA (see Appendix 10), the monitoring of fuel nitrogen content shall not be required and the permittee is in compliance with the nitrogen oxides emission limitation while natural gas is the only fuel fired in the gas turbines.

F1-2. The sulfur content of the natural gas shall not exceed 0.8 percent by weight (8000 parts per million by weight).

40 CFR §60.333(b) and TAPCR 1200-03-09-.03(8)

Compliance Method: Initial compliance with this limitation was demonstrated by a source test conducted on December 17, 1996. The measured sulfur concentration value of the natural gas being combusted was less than one part per million by weight (<0.0001 percent by weight, <0.032 grains/100 scf). The Division accepted the results of the source test by letter dated April 28, 1997 (see Appendix 11).

Notwithstanding the provisions of paragraph 40 CFR §60.334 (h)(1), the permittee is not required to monitor the total sulfur content of the natural gas combusted in the turbines, instead, the permittee is in compliance with the sulfur content of the natural gas limitation by demonstrating that the natural gas used as fuel for the combustion turbines meets the definition of *natural gas* in 40 CFR §60.331(u) [see below], regardless of whether an existing custom schedule approved by the administrator for 40 CFR part 60 subpart GG requires such monitoring. The permittee shall use one of the following sources of information to make the required demonstration:

A. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20 grains/100 scf or less (Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur.); or

B. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR part 75 is required.

Definition of *natural gas* in 40 CFR §60.331(u):

Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g. , methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20

degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Source Number	Source Description
02	168 HP [@ ISO] [1.84 MMBTU/hr.] Ford Model LSG-8751-6005-A, natural gas fired 4-stroke rich burn reciprocating engine used to power a standby emergency generator

S2-1. Input Limitation(s) or Statement(s) of Design

A. The stated heat input rate of the emergency generator engine is 1.84 MM Btu/hr. Should the permittee need to modify the source(s) in a manner that increases the stated heat input rate, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of the emergency generator engine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

B. The stated power output capacity of the emergency generator engine is 168 HP at ISO. This condition is a statement of the capacity for the emergency generator engine. Should the permittee need to modify the emergency generator engine in a manner that increases the stated power output capacity, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the power output capacity of the emergency generator engine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

C. Only natural gas shall be used as fuel for the emergency generator engine. The emergency generator engine is only capable of burning this fuel. Should the permittee need to modify the emergency generator engine to allow the use of a fuel other than natural gas, a construction permit or Title V modification shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the type of fuel used by the emergency generator engine. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be

kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S2-2. Production Limitation(s)

Not applicable

S2-3. Operating Hour Limitation(s)

Not applicable

S2-4. Emission Limitations

A. Particulate matter (PM) emitted from the emergency generator engine shall not exceed 0.60 pounds per million British thermal units (lbs/MMBtu) (1.1 pounds per hour [lbs/hr]).

TAPCR 1200-03-06-.02(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the use of emission factor of (9.50 E-03 + 9.91 E-03) pounds per million Btu from Table 3.2-3 of AP-42, Chapter 3, Section 2, Emission Factors for Natural Gas-fired Reciprocating Engines, supplement to 5th Ed. dated August 2000.

B. Sulfur dioxide (SO_2) emitted from the emergency generator engine shall not exceed 0.11 pounds per hour (lbs/hr).

TAPCR 1200-03-14-.03(5)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A, S2-1.C, and S2-6** and the use of emission factor of (5.88 E-04) pounds per million Btu from Table 3.2-3 of AP-42, Chapter 3, Section 2, Emission Factors for Natural Gas-fired Reciprocating Engines, supplement to 5th Ed. dated August 2000, modified for the sulfur content of the natural gas.

C. Carbon Monoxide (CO) emitted from the emergency generator engine shall not exceed 1.71 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

D. Volatile organic compounds (VOC) emitted from the emergency generator engine shall not exceed 0.01 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

E. Nitrogen oxides (NO_X) emitted from the emergency generator engine shall not exceed 1.04 tons during all intervals of 12 consecutive months.

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

S2-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

S2-6. The sulfur content of the natural gas shall be less than or equal to 20 grains per 100 standard cubic feet (0.068 % percent by weight, 680 parts per million by weight).

TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall use the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the natural gas, specifying that the maximum total sulfur content of the natural gas is 20 grains/100 scf or less.

S2-7. The permittee has designated this source as an "emergency generator." According to a memorandum dated September 6, 1995 from John Seitz, Director, Office of Air Quality Planning and Standards, "EPA believes that **500** hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions." This value will be assumed to be the maximum operating hours per 12-month period for this source for the purpose of establishing a "potential to emit" for the facility for the pollutants of concern for the engine specified in **Conditions S2-4.A through S2-4.E.** The 500-hour value includes the **100** hours per year for maintenance checks and readiness testing as specified in **Condition F2-5.B.** In the event that the unit operates more than **500** hours per calendar year, the total annual hours of operation shall be reported to the Technical Secretary by the end of the calendar year, along with the amount of fuel used, and actual emissions from this unit.

TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance shall be demonstrated by the recordkeeping required by **Condition F2-5**, and by the report(s) submitted to the Technical Secretary in the event that the unit operates more than **500** hours per calendar year.

Federal Requirements

F2-1. Pursuant to 40 CFR §63.6603(a), the permittee shall comply with the following requirements specified in Table 2d to Subpart ZZZZ of Part 63:

For each . . .	The permittee must meet the following requirement, except during periods of startup . . .	During periods of startup the permittee must . . .
5. Emergency stationary SI RICE; black start stationary SI RICE; nonemergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[1]The source has the option to utilize an oil analysis program as described in 40 CFR §63.6625(j) in order to extend the specified oil change requirement in Table 2d to Subpart ZZZZ of Part 63.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d to Subpart ZZZZ of 40 CFR Part 63, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

40 CFR §63.6603(a), 40 CFR §63.6625(h) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall keep records of the following: (1) the dates of oil and filter change and the hours showing on the engine's hour meter at the time of oil and filter change, (2) the dates of spark plug inspection and the hours showing on the engine's hour meter at the time of spark plug inspection, (3) the dates of hoses and belts inspection and the hours showing on the engine's hour meter at the time of hoses and belts inspection; and (4) the engine's time spent at idle and the engine's startup time at each time the engine has a startup.

F2-2. The permittee must install a non-resettable hour meter if one is not already installed in this existing emergency stationary RICE located at an area source of HAP emissions.

40 CFR §63.6625(f) and TAPCR 1200-03-09-.03(8)

F2-3. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in **Condition 0**. The oil analysis must be performed at the same frequency specified for changing the oil in **Condition 0**. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the

engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later.

40 CFR §63.6625(j) and TAPCR 1200-03-09-.03(8)

Compliance Method: The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

F2-4. The permittee must demonstrate continuous compliance with **Condition 0** according to the following method(s) specified in Table 6 to Subpart ZZZZ of Part 63.

For each . . .	Complying with the requirement to . . .	The permittee must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices (**Condition 0**)	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR §63.6605(b), 40 CFR §63.6625(e), 40 CFR §63.6640(a) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee must keep records of the operation of the existing emergency engine and maintenance conducted on the existing emergency engine in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or the maintenance plan developed by the permittee.

(a) Records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
(b) Records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR §63.10(b)(1).
(c) Records must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

F2-5. The permittee must operate the emergency stationary RICE according to the requirements in paragraphs A through D of this permit condition. In order for the engine to be considered an emergency stationary RICE under 40 CFR Part 63 Subpart ZZZZ, any operation other than emergency operation, and operation in non-emergency situations for 50 hours per year, as described in paragraphs A through D of this permit condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs A through D of this permit condition, the engine will not be considered an emergency engine under 40 CFR Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

A. There is no time limit on the use of emergency stationary RICE in emergency situations.
B. The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs 1 through 3 below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs c and d below counts as part of the 100 hours per calendar year allowed by this paragraph
    1. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
    2. [Reserved – Vacated and Remanded on 05/01/2015]
    3. [Reserved – Vacated and Remanded on 05/01/2015]
C. [Reserved-Not Applicable]
D. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph B of this condition.

40 CFR §63.6640(f) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee must keep records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must document how many hours for each engine are spent for emergency operation, including what classified the operation as emergency and how many hours for each engine are spent for non-emergency operation. The permittee shall maintain a monthly log of operating hours for each engine. The permittee shall maintain the following log formats or alternative formats which readily provide the same required information.

Year:				
	Non-Emergency Operation Hours			
Month	Maintenance Checks and Readiness Testing	Other Non-Emergency Operation	Emergency Operation Hours	Comments*
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Subtotal 1				Add the numbers in each column
Subtotal 2				Non-emergency and Emergency Subtotals
TOTAL				Total Hours of operation for the engine
*The permittee must document the number of hours spent for emergency operation including what classified the operation as emergency and the number of hours spent for non-emergency operation.				

F2-6. This source shall comply with the general provisions according to Table 8 to Subpart ZZZZ of Part 63-Applicability of General Provisions to Subpart ZZZZ.

40 CFR §63.6665 and TAPCR 1200-03-09-.03(8)

(end of conditions)

The permit application gives the location of this source as 36.070833º Latitude and -84.541389º Longitude.

Appendix 1: Notification of Change in Responsible Person

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Former Responsible Person: _____ _____
Name Title

New Responsible Person: _____ _____
Name Title

_____
Email

Date New Responsible Person was assigned this duty: _____

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 2: Notification of Changes

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Source Number:

	Control Equipment	Stack Height (Feet)	Stack Diameter (Feet)	Exit Velocity (Feet/Second)	Exit Temperature (ºF)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					

Comments:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 3: Notification of Ownership Change

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg (Previous Owner)

Facility ID: 65-0028

Facility (Permittee): _____ (New Owner)

Email Address: _____

Secretary of State Control Number: _____ [as registered with the TN Secretary of State]

Date of Ownership Change: _____

Comments:

As the responsible person for the new owner or operator of the above mentioned facility (permittee):

- I agree to not make any changes to the stationary source(s) that meet the definition of modification as defined in Division 1200-03 or Division 0400-30[1], and
- I agree to comply with the conditions contained in **the permits listed below**, Division 1200-03 and Division 0400-30 of the Tennessee Air Pollution Control Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

List all active permits issued to the facility for which the owner wishes to assume ownership:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

[1] Appropriate application forms must be submitted prior to modification of the stationary source(s).

Appendix 4: Startup Certification

Not Applicable

Appendix 5: Fees

Not Applicable

Appendix 6: Emission Statement for VOC and NO_X

Not Applicable

Appendix 7: Agreement Letters

(PRINT ON COMPANY LETTERHEAD)

(LETTER_DATE)

Ms. Michelle Walker Owenby, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243
Air.Pollution.Control@TN.gov

Dear Ms. Owenby:

East Tennessee Natural Gas, LLC - Station 3110 - Wartburg 65-0028/979102

East Tennessee Natural Gas, LLC (ETNG) is applying for a construction permit for three natural gas-fired combustion turbines and a natural gas-fired reciprocating engine (the sources) at the ETNG's Station 110 - Wartburg (the Facility) located in Wartburg, Morgan County, Tennessee. In order to reduce annual emission fees, we agree to be bound by a permit requiring the facility to:

1. Use only natural gas as a fuel for the source. To demonstrate compliance, the Facility will maintain documentation to demonstrate the type(s) of fuel used by the sources. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

2. Limit emissions of particulate matter from the combustion turbines to no more than 0.36 pounds per hour (lbs/hr) on a daily average basis. Compliance with this emission limitation is assured by the combustion turbines heat input rating, the use of natural gas as fuel, and the emission factor of 6.60 E-03 pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

Should the facility need to increase any limit above, ETNG will apply for and receive a construction permit or Title V modification in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

Sincerely,

Robert Arnold
Director Field Operations US

Appendix 8: General Provisions for 40 CFR Part 60, Subpart GG

You are required to comply with the following General Provisions of the federal Standards of Performance for New Stationary Sources (NSPS):

General provisions citation 40 CFR	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes ☒ No ☐	
§60.2	Definitions	Yes ☒ No ☐	Additional terms defined in 40 CFR § 60.331
§60.3	Units and abbreviations	Yes ☒ No ☐	
§60.4	Address	Yes ☒ No ☐	
§60.5	Determination of construction or modification	Yes ☒ No ☐	
§60.6	Review of plans	Yes ☒ No ☐	
§60.7	Notification and Recordkeeping	Yes ☒ No ☐	
§60.8	Performance tests	Yes ☒ No ☐	
§60.9	Availability of information	Yes ☒ No ☐	
§60.10	State Authority	Yes ☒ No ☐	
§60.11	Compliance with standards and maintenance requirements	Yes ☒ No ☐	
§60.12	Circumvention	Yes ☒ No ☐	
§60.13	Monitoring requirements	Yes ☒ No ☐	Subpart GG contains specific requirements for monitoring at 40 CFR § 60.334
§60.14	Modification	Yes ☒ No ☐	
§60.15	Reconstruction	Yes ☒ No ☐	
§60.16	Priority list	Yes ☐ No ☒	
§60.17	Incorporations by reference	Yes ☒ No ☐	
§60.18	General control device requirements	Yes ☒ No ☐	
§60.19	General notification and reporting requirements	Yes ☒ No ☐	

TAPCR 1200-03-09-.03(8)

Appendix 9: General Provisions for 40 CFR Part 63, Subpart ZZZZ

As stated in 40 CFR § 63.6665, the permittee is required to comply with the following General Provisions of the federal National Emission Standards for Hazardous Air Pollutants (NESHAP):

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in 40 CFR § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR § 63.7(b)(1) only applies as specified in 40 CFR § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR § 63.7(b)(2) only applies as specified in 40 CFR § 63.6645.

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR § 63.7(c) only applies as specified in 40 CFR § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR § 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR § 63.8(e) only applies as specified in 40 CFR § 63.6645.	

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR § 63.8(f)(4) only applies as specified in 40 CFR § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR § 63.8(f)(6) only applies as specified in 40 CFR § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR § 63.9(b)(3) is reserved.
		Except that 40 CFR § 63.9(b) only applies as specified in 40 CFR § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that 40 CFR § 63.9(c) only applies as specified in 40 CFR § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR § 63.9(d) only applies as specified in 40 CFR § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that 40 CFR § 63.9(e) only applies as specified in 40 CFR § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR § 63.9(g) only applies as specified in 40 CFR § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR § 63.9(g) only applies as specified in 40 CFR § 63.6645.	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR § 63.9(h)(4) is reserved.
			Except that 40 CFR § 63.9(h) only applies as specified in 40 CFR § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR § 63.9(j).
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

TAPCR 1200-03-09-.03(8)

Appendix 10: August 14, 1987, memorandum by John B. Rasnic of EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1987

OFFICE OF
AIR AND RADIATI

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to SSCD for approval.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Attachment

cc: John Crenshaw
George Walsh
Robert Ajax
Earl Salo

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

2. Sulfur Monitoring

a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample anaylsis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

Appendix 11: April 28, 1997, Source Test Acceptance Letter

Compliance Validation Program Copy

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531

April 28, 1997

Mr. Ted Wurfel
Environmental Scientist
Tenneco Energy
P. O. 2511
1010 Milam Street
Houston, Texas 77252-2511

Reference Number: 65-0028-01-S4 (Station 3110)

Dear Mr. Wurfel:

The Tennessee Division of Air Pollution Control has received the gaseous source test report submitted by Tenneco Energy for a Solar Saturn T-1360 gas-fired compressor turbine (Unit 3A) operated by East Tennessee Natural Gas and located in Morgan County (Station 3110). This source testing was conducted on November 20, 1996 by personnel of the Tenneco Energy Environmental, Health, Safety, and Technology Services. Pursuant to the United States Environmental Protection Agency (EPA) letter dated September 19, 1996, compliance testing could be waived for two of the three gas turbines that make up this fuel burning installation if one of the turbines was determined to have nitrogen oxides emissions of less than fifty percent of the applicable federal emission standard.

The source test report has been reviewed by the Compliance Validation Program. Based on this review it has been determined that the report is technically correct and thus, is acceptable to the agency. From the review of the source test report it was noted that the sampling methodology utilized followed the procedures outlined in EPA Source Test Method 20 (40 CFR 60, Appendix A) and the Tenneco testing protocol dated October 15, 1996.

In the review of the operational parameters presented in the report it was noted that the turbine operated very close to its designed power rating. Specifics of this are listed on Attachment 1 to this letter. Thus, the operation of this turbine was at an acceptable level for an official compliance demonstration.

During the testing period the measured nitrogen oxides emissions from Unit 3A were 55.6 ppm corrected to 15 percent oxygen and ISO standard conditions and 2.8 pounds per hour. The 55.6 ppm of nitrogen oxides corrected to 15 percent oxygen and ISO standard conditions demonstrates compliance with the regulatory nitrogen oxides emission standard of 150 ppm by volume at 15 percent oxygen and on a dry basis. This standard is set forth in Subparagraph 1200-3-16-.31 (3) (a) 2. of the Tennessee Air Pollution Control Regulations (40 CFR 60.332 (a) (2)). This also demonstrates compliance with the current permit stipulated nitrogen oxides emission limit of 84 ppm of nitrogen oxides corrected to 15 percent oxygen (Permit #741853F, Condition 5). In addition the 3.76 pounds per hour of nitrogen oxides demonstrates compliance with the current permit stipulated nitrogen oxides emission limit of 27.7 pounds per hour the three gas turbines that constitute this fuel burning installation (Permit #741853F, Condition 5).

The measured sulfur concentration value of the fuel being combusted in this turbine, less than one ppm sulfur, demonstrates that this turbine was demonstrating compliance with either the sulfur dioxide emission standard of 150 ppm by volume at 15 percent oxygen and on a dry basis or the maximum fuel sulfur content of 0.8 percent by weight. These standards are set forth in Paragraph 1200-3-16-.31 (4) of the Regulations (40 CFR 60.333). This also demonstrates compliance with the current permit stipulated sulfur dioxide emission limits of four ppm of sulfur dioxide corrected to 15 percent oxygen and on a dry basis and 1.47 pounds per hour (Permit #741853F, Condition 4).

The Division considers that this source test report is acceptable as a demonstration of compliance and from the data presented considers that this turbine has met the stipulated testing requirements and is in compliance with the applicable nitrogen oxides and sulfur dioxide emission standards. In addition, as the nitrogen oxides emission rate was less than fifty percent of the applicable federal emission standard, the testing requirement for the other two turbines located at this fuel burning installation is waived pursuant to the EPA letter dated September 19, 1996.

Mr. Ted Wurfel
Tenneco Energy
Station 3110 Unit 3A
April 28, 1996
page 3 of 3

If you have any questions concerning the matters addressed by this letter, please contact Mr. Jeryl W. Stewart at (615) 532-0605.

Sincerely,

Jeryl W. Stewart

for John W. Walton, P.E.
Technical Secretary
Tennessee Air Pollution Control Board

attachment - 1

cc: Knoxville Field Office

ATTACHMENT 1

Summary of Turbine Operation

Station 3110 Unit 3A

Test Date November 20, 1996

Turbine 3A heat input during test 13.9 MMBtu/hr

Rated heat input capacity for this turbine 14.45 MMBtu/hr
(from April 4, 1994 permit application)

Turbine 3A turbine horsepower during test 1,209 BHP

Rated turbine horsepower for this turbine 1,300 BHP
(from April 4, 1994 permit application)

Enbridge
5400 Westheimer Court
Houston, Texas 77056

November 22, 2021

Ms. Michelle Walker Owenby, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243
Air.Pollution.Control@TN.gov

RE: East Tennessee Natural Gas, LLC
Station 3110 - Wartburg Compressor Station, 65-0028/979102
Title V Permit Renewal Application – Agreement Letter

Dear Ms. Owenby:

East Tennessee Natural Gas, LLC (ETNG) is applying for a construction permit for three natural gas-fired combustion turbines and a natural gas-fired reciprocating engine (the sources) at the ETNG's Station 110 - Wartburg (the Facility) located in Wartburg, Morgan County, Tennessee. In order to reduce annual emission fees, we agree to be bound by a permit requiring the facility to:

1. Use only natural gas as a fuel for the source. To demonstrate compliance, the Facility will maintain documentation to demonstrate the type(s) of fuel used by the sources. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

2. Limit emissions of particulate matter from the combustion turbines to no more than 0.36 pounds per hour (lbs/hr) on a daily average basis. Compliance with this emission limitation is assured by the combustion turbines heat input rating, the use of natural gas as fuel, and the emission factor of 6.60 E-03 pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

Should the facility need to increase any limit above, ETNG will apply for and receive a construction permit or Title V modification in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

If you have any questions or comments about the information presented in this letter, please do not hesitate to contact Mr. Bobby Van Borssum at (713) 627-4257 or Bobby.VanBorssum@enbridge.com.

Sincerely,

EAST TENNESSEE NATURAL GAS, LLC

Robert Arnold
Director, Field Operations Central Region

STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE

PERMIT TO CONSTRUCT / MODIFY AIR CONTAMINANT SOURCE(S)

Permit Number: 979102

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Facility Address: 142 Clayton Howard Road, Wartburg
Morgan County

Facility Classification: Title V

Federal Requirements: 40 CFR Part 60 Subpart GG
40 CFR Part 63 Subpart ZZZZ

Facility Description: Natural Gas Pipeline Compressor Station

Permit 979102, consisting of 35 pages is hereby issued <Issuance Date>, pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit expires on <Expiration Date>. The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

Michelle W. Owenby
Technical Secretary
Tennessee Air Pollution Control Board

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

Section I – Sources Included in this Construction Permit

FACILITY DESCRIPTION			
Source Number	**Source Description**	**Status**	**Control Device/Equipment**
01	Three (3), 1,450 HP (@ 0.01 °F) [17.37 MMBTU/hr] Gas Turbine		None
02	One (1) Four-stroke rich burn 168 Hp, SI Natural Gas-fired EmergencyEngine		None

Deleted: One (1) 1784 HP (@ 0.01 °F) [20.69 MMBTU/hr] Gas¶
Turbine, and One (1)

Deleted: 220

Deleted: with 150 kW Generator

Section II – Permit Record

Permit Type	Description of Permit Action	Issue Date
Initial	Initial construction permit issuance	<Issuance Date>

Section III - General Permit Conditions

G1. Responsible Person

The application that was utilized in the preparation of this construction permit is dated June 1, 2021 and is signed by Robert Arnold, Director Field Operations US, the duly authorized representative for the Responsible Person for the permittee. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Commented [CZ1]: A letter dated 9/10/2021 was emailed to Air.Pollution.Control@tn.gov. The RO changed to Michele Harradence, but continued to keep Robert Arnold as the Duly Authorized Representative for ETNG.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in Appendix 1 of this permit no later than 30 days after the change. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

G2. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

G3. Submittals

Unless otherwise specified within this permit, the permittee shall submit, preferably via email and in Adobe Portable Document format (PDF), all applicable plans, checklists, certifications, notifications, test protocols, reports, and applications to the attention of the following Division Programs at the email addresses indicated in the table below:

Permitting Program	Compliance Validation Program	Field Services Program
• Notifications • Startup certifications • Applications • NSPS reports • MACT/GACT/NESHAP reports • Emission statements • Construction permit extension requests	• Test protocols • Emission test reports • Visible emission evaluation reports	• Semiannual reports • Annual compliance certifications/status reports
Division of Air Pollution Control William R. Snodgrass TN Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243 Air.Pollution.Control@tn.gov		Knoxville Environmental Field Office Division of Air Pollution Control 3711 Middlebrook Pike Knoxville, TN 37921 APC.KnoxEFO@tn.gov

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the email addresses above, the permittee may submit the information to the attention of the respective Division Programs at the mailing addresses listed above.

TAPCR 1200-03-09-.03(8)

G4. Notification of Changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification
- change in stack height or diameter
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in Appendix 2 of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

G5. Permit Transference

A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.
TAPCR 1200-03-09-.03(6)(b) and 1200-03-09-.01(1)(b)

B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in Appendix 3 of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

G6. Operating Permit Application Submittal

The permittee shall apply for a Title V operating permit within 360 days of issuance of this permit.

TAPCR 1200-03-09-.02(11)(d)1(i)(II)

G7. Temporary Operating Permit

A. This construction permit shall serve as a temporary operating permit from the date of issuance, until the Technical Secretary issues a Title V operating permit, provided the permittee submits an operating permit application within the timeframe specified in **Condition G6**.

TAPCR 1200-03-09-.02(1), 1200-03-09-.02(2), and 1200-03-09-.02(11)(d)1(i)(V)

B. If construction of the air contaminant source(s) cannot be completed and/or an operating permit application cannot be filed with the Technical Secretary by the expiration date of this permit, the permittee must submit a permit extension request 30 days prior to permit expiration.

TAPCR 1200-03-09-.02(1) and 1200-03-09-.02(3)

G8. Startup Certification for New or Modified Source(s)

Not applicable

G9. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees to the Tennessee Division of Air Pollution Control.

TAPCR 1200-03-26-.02

G10. General Recordkeeping Requirements

A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping
No later than seven days from the end of the day for which the data is required.	No later than seven days from the end of the week for which the data is required.	No later than 30 days from the end of the month for which the data is required.

B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon

request. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

G11. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

G12. Visible and Fugitive Emissions

A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

Compliance Method: When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
(b) Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts;
(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

Compliance Method: When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

Compliance Method: When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982 and August 24, 1984.

G13. Facility-wide Limitations

Not applicable

G14. NSPS/NESHAP/MACT/GACT Standards

The following source(s) are subject to and shall comply with all applicable requirements of each NSPS/NESHAP/MACT/GACT standard as indicated in the table below, including the General Provisions identified in Appendices 8 and 9. The applicable requirements of each standard are incorporated into this permit pursuant to TAPCR 1200-03-09-.03(8).

Source	NESHAP/MACT/GACT	NSPS
01	Not Applicable	40 CFR 60: GG
02	40 CFR 63: ZZZZ	Not Applicable

TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance methods are provided in the conditions in **Section V** of this permit.

G15. VOC and NO_X Emission Statement

Not Applicable

G16. Permit Supersedes Statement

This permit supersedes all previously issued permits for this/these source(s).

TAPCR 1200-03-09-.03(8)

G17. Source Testing Requirements

Not Applicable

Section IV – Federal and/or State Only Requirements

See Section V – Source Specific Permit Conditions

Section V - Source Specific Permit Conditions

Source Number	Source Description
01	Three 1,360 HP [@ ISO] [17.37 MMBtu/hr. @ 0.01 °F] Solar Saturn Model T-1300 natural gas fired combustion turbines used to power compressors in a pipeline natural gas compressor station

Commented [CZ2]: For consistency, should this change to 1,450 HP @ 0.01 deg F?

S1-1. Input Limitation(s) or Statement(s) of Design

A. The stated heat input rate of each combustion turbine is: 17.37 MMBut/hr. @0.01 °F. Should the permittee need to modify a combustion turbine(s) in a manner that increases the stated heat input rate, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.01(1)(d) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of each turbine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

B. The stated power output capacity of each combustion turbine is: 1,360 HP @ ISO. This condition is a statement of the capacity for the combustion turbine(s). Should the permittee need to modify a combustion turbine(s) in a manner that increases the stated power output capacity, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

Commented [CZ3]: For consistency, should this change to 1,450 HP @ 0.01 deg F?

Note that the amount of horsepower generated by a turbine can vary significantly due to ambient air conditions. Thus, the turbine HP rating is linked to a reference point, such as ISO conditions or ambient air temperature of 0.01 deg F.

TAPCR 1200-03-09-.01(1)(d) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of each turbine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

C. Only natural gas shall be used as fuel for the combustion turbines. The combustion turbines are only capable of burning this fuel. Should the permittee need to modify the combustion turbines to allow the use of a fuel other than natural gas, a construction permit or Title V modification shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the type of fuel used by the three combustion turbines. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S1-2. Production Limitation(s)

Not applicable

S1-3. Operating Hour Limitation(s)

Not applicable

S1-4. Emission Limitations

A. Particulate matter (PM) emitted from the three combustion turbines shall not exceed 0.36 pounds per hour (0.12 pounds per hour from each turbine).

TAPCR 1200-03-26-.02(6)(b) and the agreement letter dated November 22, 2021.

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S1-1.A and S1-1.C** and the use of emission factor of 6.60 E-03 pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

B. Sulfur dioxide (SO_2) emitted from the three combustion turbines shall not exceed 3.33 pounds per hour (1.11 pounds per hour from each turbine).

TAPCR 1200-03-14-.03(5), 40 CFR §60.333(b) and TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S1-1.A, S1-1.C, and F1-2**, and the use of emission factor of 0.056 pounds per million Btu from Table 3.1- 2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

C. Carbon Monoxide (CO) emitted from the three combustion turbines shall not exceed 189.18 tons during all intervals of 12 consecutive months (63.06 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

D. Volatile organic compounds (VOC) emitted from the three combustion turbines shall not exceed 5.94 tons during all intervals of 12 consecutive months (1.98 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

E. Nitrogen oxides (NO_X) emitted from the three combustion turbines shall not exceed 116.46 tons during all intervals of 12 consecutive months (38.82 tons during all intervals of 12 consecutive months from each turbine).

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is based on compliance with **Conditions S1-1.A and S1-1.C** of this permit and the vendor guarantees described in the application dated June 1, 2021.

Deleted: DATE

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Commented [CZ6]: Not sure by what is meant by "interval?"

Does the agency mean "all modes of operation of the turbine" including SU, SD, low temp, etc.?

Or does the agency mean something else?

Commented [BVB7R6]: Does "interval of 12 consecutive months" mean 12-month rolling average?

Commented [CZ8]: Not sure by what is meant by "interval?"

Does the agency mean "all modes of operation of the turbine" including SU, SD, low temp, etc.?

Or does the agency mean something else?

Commented [BVB9R8]: Does "interval of 12 consecutive months" mean 12-month rolling average?

Commented [CZ10]: Does the agency mean "all modes of operation of the turbine" including SU, SD, low temp, etc.?

Or does the agency mean something else?

Commented [BVB11R10]: Does "interval of 12 consecutive months" mean 12-month rolling average?

S1-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

Federal Requirements

F1-1. Nitrogen oxides (NO_X) emitted from the three combustion turbines shall not exceed 0.0150% by volume on a dry basis corrected to 15% oxygen.

40 CFR §60.332(a)(2) and TAPCR 1200-03-09-.03(8)

Compliance Method: Initial compliance with this limitation was demonstrated by a source test conducted on December 17, 1996. The nitrogen oxides (NO_X) concentration determined by the source test was 55.6 parts per million by volume on a dry basis (0.0056% by volume on a dry basis corrected to 15% oxygen). The Division accepted the results of the source test by letter dated April 28, 1997 (see Appendix 11).

Consistent with the provisions of the memorandum of August 14, 1987 by John B. Rasnic of EPA (see Appendix 10), the monitoring of fuel nitrogen content shall not be required and the permittee is in compliance with the nitrogen oxides emission limitation while natural gas is the only fuel fired in the gas turbines.

Commented [CZ12]: This 1987 memo is outdated. NSPS GG has been updated to allow this now.

The citation referenced in Appendix 10, 60.334(b)(2), no longer aligns with the conditions in the current version of NSPS GG. This reference aligns with the 1979 version of the rule. The current equivalent text is at 60.334(i)(2) and (i)(3). Furthermore, the purpose of this 1987 letter was to clarify that Regional EPA offices have the authority to approve custom fuel monitoring plans. It is understood today that they do have the authority. Lastly, this site is not relying on a custom fuel monitoring schedule since the turbine operates on pipeline quality natural gas.

F1-2. The sulfur content of the natural gas shall not exceed 0.8 percent by weight (8,000 parts per million by weight).

40 CFR §60.333(b) and TAPCR 1200-03-09-.03(8)

Compliance Method: Initial compliance with this limitation was demonstrated by a source test conducted on December 17, 1996. The measured sulfur concentration value of the natural gas being combusted was less than one part per million by weight (<0.0001 percent by weight, <0.032 grains/100 scf). The Division accepted the results of the source test by letter dated April 28, 1997 (see Appendix 11).

Notwithstanding the provisions of paragraph 40 CFR §60.334 (h)(1), the permittee is not required to monitor the total sulfur content of the natural gas combusted in the turbines, instead, the permittee is in compliance with the sulfur content of the natural gas limitation by demonstrating that the natural gas used as fuel for the combustion turbines meets the definition of *natural gas* in 40 CFR §60.331(u) [see below], regardless of whether an existing custom schedule approved by the administrator for 40 CFR part 60 subpart GG requires such monitoring. The permittee shall use one of the following sources of information to make the required demonstration:

A. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20 grains/100 scf or less (Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20 degrees Celsius total sulfur.); or

B. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR part 75 is required.

Definition of *natural gas* in 40 CFR §60.331(u):

Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g. , methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Equivalents of this in other units are as follows: 0.068 weight percent total sulfur, 680 parts per million by weight (ppmw) total sulfur, and 338 parts per million by volume (ppmv) at 20

degrees Celsius total sulfur. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Source Number	Source Description
02	168 HP [@ ISO] [1.84 MMBTU/hr.] Ford Model LSG-8751-6005-A, natural gas fired 4-stroke rich burn reciprocating engine used to power a standby emergency generator

S2-1. Input Limitation(s) or Statement(s) of Design

A. The stated heat input rate of the emergency generator engine is 1.84 MMBtu/hr. Should the permittee need to modify the source(s) in a manner that increases the stated heat input rate, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the heat input rate of the emergency generator engine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

B. The stated power output capacity of the emergency generator engine is 168 HP at ISO. This condition is a statement of the capacity for the emergency generator engine. Should the permittee need to modify the emergency generator engine in a manner that increases the stated power output capacity, a construction permit or Title V modification shall be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the power output capacity of the emergency generator engine. Documentation may include, but is not limited to, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

C. Only natural gas shall be used as fuel for the emergency generator engine. The emergency generator engine is only capable of burning this fuel. Should the permittee need to modify the emergency generator engine to allow the use of a fuel other than natural gas, a construction permit or Title V modification shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated June 1, 2021

Compliance Method: The permittee shall maintain documentation to demonstrate the type of fuel used by the emergency generator engine. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be

Deleted:

kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S2-2. Production Limitation(s)

Not applicable

S2-3. Operating Hour Limitation(s)

Not applicable

S2-4. Emission Limitations

A. Particulate matter (PM) emitted from the emergency generator engine shall not exceed 0.60 pounds per million British thermal units (lbs/MMBtu) (1.1 pounds per hour [lbs/hr]).

TAPCR 1200-03-06-.02(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the use of emission factor of (9.50 E-03 + 9.91 E-03) pounds per million Btu from Table 3.2-3 of AP-42, Chapter 3, Section 2, Emission Factors for Natural Gas-fired Reciprocating Engines, supplement to 5th Ed. dated August 2000.

Commented [BVB13]: Note that the 9.50 factor is for filterable PM and the 9.91 factor is for condensable PM. It would be beneficial to explicitly mention this in the text.

B. Sulfur dioxide (SO_2) emitted from the emergency generator engine shall not exceed 0.11 pounds per hour (lbs/hr).

TAPCR 1200-03-14-.03(5)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A, S2-1.C, and S2-6** and the use of emission factor of (5.60 E-02) pounds per million Btu from Table 3.2-3 of AP-42, Chapter 3, Section 2, Emission Factors for Natural Gas-fired Reciprocating Engines, supplement to 5th Ed. dated August 2000, as modified for the sulfur content of the natural gas (20 gr/100 scf).

Deleted: 5.88 E-04

C. Carbon Monoxide (CO) emitted from the emergency generator engine shall not exceed 1.71 tons during all intervals of 12 consecutive months.

Commented [CZ14]: All modes of operation?

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

D. Volatile organic compounds (VOC) emitted from the emergency generator engine shall not exceed 0.015 tonsduring all intervals of 12 consecutive months.

Commented [CZ15]: The actual annual PTE is 0.0149 tpy. Thus, truncating the annual PTE to only 0.01 could create a compliance violation if actual emissions were 0.014 tpy.

Commented [CZ16]: All modes of operation?

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

E. Nitrogen oxides (NO_X) emitted from the emergency generator engine shall not exceed 1.04 tons during all intervals of 12 consecutive months.

Commented [CZ17]: All modes of operation?

TAPCR 1200-03-07-.07(2)

Compliance Method: Compliance with this emission limitation is assured by compliance with **Conditions S2-1.A and S2-1.C** and the vendor guarantees described in the application dated June 1, 2021.

S2-5. Source-Specific Visible Emissions Limitation(s)

Not applicable

S2-6. The sulfur content of the natural gas shall be less than or equal to 20 grains per 100 standard cubic feet (0.068 % percent by weight, 680 parts per million by weight).

TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall use the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the natural gas, specifying that the maximum total sulfur content of the natural gas is 20 grains/100 scf or less.

S2-7. The permittee has designated this source as an "emergency generator." According to a memorandum dated September 6, 1995 from John Seitz, Director, Office of Air Quality Planning and Standards, "EPA believes that **500** hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions." This value will be assumed to be the maximum operating hours per 12-month period for this source for the purpose of establishing a "potential to emit" for the facility for the pollutants of concern for the engine specified in **Conditions S2-4.A through S2-4.E.** The 500-hour value includes the **100** hours per year for maintenance checks and readiness testing as specified in **Condition F2-5.B.** In the event that the unit operates more than **500** hours per calendar year, the total annual hours of operation shall be reported to the Technical Secretary by the end of the calendar year, along with the amount of fuel used, and actual emissions from this unit.

TAPCR 1200-03-09-.03(8)

Compliance Method: Compliance shall be demonstrated by the recordkeeping required by **Condition F2-5**, and by the report(s) submitted to the Technical Secretary in the event that the unit operates more than **500** hours per calendar year.

Federal Requirements

F2-1. Pursuant to 40 CFR §63.6603(a), the permittee shall comply with the following requirements specified in Table 2d to Subpart ZZZZ of Part 63:

For each . . .	The permittee must meet the following requirement, except during periods of startup . . .	During periods of startup the permittee must . . .
5. Emergency stationary SI RICE; black start stationary SI RICE; nonemergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

[1]The source has the option to utilize an oil analysis program as described in 40 CFR §63.6625(j) in order to extend the specified oil change requirement in Table 2d to Subpart ZZZZ of Part 63.

[2]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d to Subpart ZZZZ of 40 CFR Part 63, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

40 CFR §63.6603(a), 40 CFR §63.6625(h) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee shall keep records of the following: (1) the dates of oil and filter change and the hours showing on the engine's hour meter at the time of oil and filter change, (2) the dates of spark plug inspection and the hours showing on the engine's hour meter at the time of spark plug inspection, (3) the dates of hoses and belts inspection and the hours showing on the engine's hour meter at the time of hoses and belts inspection; and (4) the engine's time spent at idle and the engine's startup time at each time the engine has a startup.

F2-2. The permittee must install a non-resettable hour meter if one is not already installed in this existing emergency stationary RICE located at an area source of HAP emissions.

40 CFR §63.6625(f) and TAPCR 1200-03-09-.03(8)

F2-3. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in **Condition 0**, The oil analysis must be performed at the same frequency specified for changing the oil in **Condition 0**, The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the

engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later.

40 CFR §63.6625(j) and TAPCR 1200-03-09-.03(8)

Compliance Method: The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

F2-4. The permittee must demonstrate continuous compliance with **Condition** 0 according to the following method(s) specified in Table 6 to Subpart ZZZZ of Part 63.

For each . . .	Complying with the requirement to . . .	The permittee must demonstrate continuous compliance by . . .
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices (**Condition 0**)	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR §63.6605(b), 40 CFR §63.6625(e), 40 CFR §63.6640(a) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee must keep records of the operation of the existing emergency engine and maintenance conducted on the existing emergency engine in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or the maintenance plan developed by the permittee.

(a) Records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).
(b) Records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record according to 40 CFR §63.10(b)(1).
(c) Records must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

F2-5. The permittee must operate the emergency stationary RICE according to the requirements in paragraphs A through D of this permit condition. In order for the engine to be considered an emergency stationary RICE under 40 CFR Part 63 Subpart ZZZZ, any operation other than emergency operation, and operation in non-emergency situations for 50 hours per year, as described in paragraphs A through D of this permit condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs A through D of this permit condition, the engine will not be considered an emergency engine under 40 CFR Part 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.

A. There is no time limit on the use of emergency stationary RICE in emergency situations.
B. The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs 1 through 3 below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs c and d below counts as part of the 100 hours per calendar year allowed by this paragraph
    1. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
    2. [Reserved – Vacated and Remanded on 05/01/2015]
    3. [Reserved – Vacated and Remanded on 05/01/2015]
C. [Reserved-Not Applicable]
D. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph B of this condition.

40 CFR §63.6640(f) and TAPCR 1200-03-09-.03(8)

Compliance Method: The permittee must keep records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must document how many hours for each engine are spent for emergency operation, including what classified the operation as emergency and how many hours for each engine are spent for non-emergency operation. The permittee shall maintain a monthly log of operating hours for each engine. The permittee shall maintain the following log formats or alternative formats which readily provide the same required information.

Year:				
	Non-Emergency Operation Hours			
Month	Maintenance Checks and Readiness Testing	Other Non-Emergency Operation	Emergency Operation Hours	Comments*
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Subtotal 1				Add the numbers in each column
Subtotal 2				Non-emergency and Emergency Subtotals
TOTAL				Total Hours of operation for the engine
*The permittee must document the number of hours spent for emergency operation including what classified the operation as emergency and the number of hours spent for non-emergency operation.				

F2-6. This source shall comply with the general provisions according to Table 8 to Subpart ZZZZ of Part 63-Applicability of General Provisions to Subpart ZZZZ.

40 CFR §63.6665 and TAPCR 1200-03-09-.03(8)

(end of conditions)

The permit application gives the location of this source as 36.070833º Latitude and -84.541389º Longitude.

Appendix 1: Notification of Change in Responsible Person

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Former Responsible Person: _____ _____
Name Title

New Responsible Person: _____ _____
Name Title

_____
Email

Date New Responsible Person was assigned this duty: _____

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 2: Notification of Changes

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg

Facility ID: 65-0028

Source Number:

	Control Equipment	Stack Height (Feet)	Stack Diameter (Feet)	Exit Velocity (Feet/Second)	Exit Temperature (ºF)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					

Comments:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 3: Notification of Ownership Change

Facility (Permittee): East Tennessee Natural Gas, LLC - Station 3110 - Wartburg (Previous Owner)

Facility ID: 65-0028

Facility (Permittee): _____ (New Owner)

Email Address: _____

Secretary of State Control Number: _____ [as registered with the TN Secretary of State]

Date of Ownership Change: _____

Comments:

As the responsible person for the new owner or operator of the above mentioned facility (permittee):

- I agree to not make any changes to the stationary source(s) that meet the definition of modification as defined in Division 1200-03 or Division 0400-30[1], and
- I agree to comply with the conditions contained in **the permits listed below**, Division 1200-03 and Division 0400-30 of the Tennessee Air Pollution Control Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

List all active permits issued to the facility for which the owner wishes to assume ownership:

As the Responsible Person of the above mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

[1] Appropriate application forms must be submitted prior to modification of the stationary source(s).

Appendix 4: Startup Certification

Not Applicable

Appendix 5: Fees

Not Applicable

Appendix 6: Emission Statement for VOC and NO_X

Not Applicable

Appendix 7: Agreement Letters

(PRINT ON COMPANY LETTERHEAD)

(LETTER_DATE)

Ms. Michelle Walker Owenby, Director
Division of Air Pollution Control
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower, 15th Floor
312 Rosa L. Parks Avenue
Nashville, TN 37243
Air.Pollution.Control@TN.gov

Dear Ms. Owenby:

East Tennessee Natural Gas, LLC - Station 3110 - Wartburg 65-0028/979102

East Tennessee Natural Gas, LLC (ETNG) is applying for a construction permit for three natural gas-fired combustion turbines and a natural gas-fired reciprocating engine (the sources) at the ETNG's Station 110 - Wartburg (the Facility) located in Wartburg, Morgan County, Tennessee. In order to reduce annual emission fees, we agree to be bound by a permit requiring the facility to:

1. Use only natural gas as a fuel for the source. To demonstrate compliance, the Facility will maintain documentation to demonstrate the type(s) of fuel used by the sources. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

2. Limit emissions of particulate matter from the combustion turbines to no more than 0.36 pounds per hour (lbs/hr) on a daily average basis. Compliance with this emission limitation is assured by the combustion turbines heat input rating, the use of natural gas as fuel, and the emission factor of 6.60 E-03 pounds per million Btu from Table 3.1-2a of AP-42, Chapter 3, Section 1, Stationary Gas Turbines, supplement to 5th Ed. dated 4/00.

Should the facility need to increase any limit above, ETNG will apply for and receive a construction permit or Title V modification in accordance with TAPCR 1200-03-09-.01 or TAPCR 1200-03-09-.02(11)(d)1(i)(V) prior to making the change.

Sincerely,

Robert Arnold
Director Field Operations US

Appendix 8: General Provisions for 40 CFR Part 60, Subpart GG

You are required to comply with the following General Provisions of the federal Standards of Performance for New Stationary Sources (NSPS):

General provisions citation 40 CFR	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes ☒ No ☐	
§60.2	Definitions	Yes ☒ No ☐	Additional terms defined in 40 CFR § 60.331
§60.3	Units and abbreviations	Yes ☒ No ☐	
§60.4	Address	Yes ☒ No ☐	
§60.5	Determination of construction or modification	Yes ☒ No ☐	
§60.6	Review of plans	Yes ☒ No ☐	
§60.7	Notification and Recordkeeping	Yes ☒ No ☐	
§60.8	Performance tests	Yes ☒ No ☐	
§60.9	Availability of information	Yes ☒ No ☐	
§60.10	State Authority	Yes ☒ No ☐	
§60.11	Compliance with standards and maintenance requirements	Yes ☒ No ☐	
§60.12	Circumvention	Yes ☒ No ☐	
§60.13	Monitoring requirements	Yes ☒ No ☐	Subpart GG contains specific requirements for monitoring at 40 CFR § 60.334
§60.14	Modification	Yes ☒ No ☐	
§60.15	Reconstruction	Yes ☒ No ☐	
§60.16	Priority list	Yes ☐ No ☒	
§60.17	Incorporations by reference	Yes ☒ No ☐	
§60.18	General control device requirements	Yes ☒ No ☐	
§60.19	General notification and reporting requirements	Yes ☒ No ☐	

TAPCR 1200-03-09-.03(8)

Appendix 9: General Provisions for 40 CFR Part 63, Subpart ZZZZ

As stated in 40 CFR § 63.6665, the permittee is required to comply with the following General Provisions of the federal National Emission Standards for Hazardous Air Pollutants (NESHAP):

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes	Additional terms defined in 40 CFR § 63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved]		
§ 63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§ 63.6(c)(3)-(4)	[Reserved]		
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§ 63.6(d)	[Reserved]		
§ 63.6(e)	Operation and maintenance	No.	
§ 63.6(f)(1)	Applicability of standards	No.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes.	
§ 63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at 40 CFR §§ 63.6610, 63.6611, and 63.6612.
§ 63.7(a)(3)	CAA section 114 authority	Yes.	
§ 63.7(b)(1)	Notification of performance test	Yes	Except that 40 CFR § 63.7(b)(1) only applies as specified in 40 CFR § 63.6645.
§ 63.7(b)(2)	Notification of rescheduling	Yes	Except that 40 CFR § 63.7(b)(2) only applies as specified in 40 CFR § 63.6645.

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.7(c)	Quality assurance/test plan	Yes	Except that 40 CFR § 63.7(c) only applies as specified in 40 CFR § 63.6645.
§ 63.7(d)	Testing facilities	Yes.	
§ 63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at 40 CFR § 63.6620.
§ 63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at 40 CFR § 63.6620.
§ 63.7(e)(3)	Test run duration	Yes.	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§ 63.7(f)	Alternative test method provisions	Yes.	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§ 63.7(h)	Waiver of tests	Yes.	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at 40 CFR § 63.6625.
§ 63.8(a)(2)	Performance specifications	Yes.	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No.	
§ 63.8(b)(1)	Monitoring	Yes.	
§ 63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§ 63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§ 63.8(c)(1)(i)	Routine and predictable SSM	No	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§ 63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes.	
§ 63.8(e)	CMS performance evaluation	Yes	Except for 40 CFR § 63.8(e)(5)(ii), which applies to COMS.
		Except that 40 CFR § 63.8(e) only applies as specified in 40 CFR § 63.6645.	

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that 40 CFR § 63.8(f)(4) only applies as specified in 40 CFR § 63.6645.
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that 40 CFR § 63.8(f)(6) only applies as specified in 40 CFR § 63.6645.
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at 40 CFR §§ 63.6635 and 63.6640.
§ 63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§ 63.9(b)(1)-(5)	Initial notifications	Yes	Except that 40 CFR § 63.9(b)(3) is reserved.
		Except that 40 CFR § 63.9(b) only applies as specified in 40 CFR § 63.6645.	
§ 63.9(c)	Request for compliance extension	Yes	Except that 40 CFR § 63.9(c) only applies as specified in 40 CFR § 63.6645.
§ 63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that 40 CFR § 63.9(d) only applies as specified in 40 CFR § 63.6645.
§ 63.9(e)	Notification of performance test	Yes	Except that 40 CFR § 63.9(e) only applies as specified in 40 CFR § 63.6645.
§ 63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	Except that 40 CFR § 63.9(g) only applies as specified in 40 CFR § 63.6645.
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that 40 CFR § 63.9(g) only applies as specified in 40 CFR § 63.6645.	
§ 63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. 40 CFR § 63.9(h)(4) is reserved.
			Except that 40 CFR § 63.9(h) only applies as specified in 40 CFR § 63.6645.
§ 63.9(i)	Adjustment of submittal deadlines	Yes.	
§ 63.9(j)	Change in previous information	Yes.	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in 40 CFR § 63.9(j).
§ 63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	

General Provisions Citation 40 CFR	Subject of Citation	Applies to Subpart	Explanation
§ 63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§ 63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§ 63.10(b)(2)(vi)-(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS	Yes	Except that 40 CFR § 63.10(c)(2)-(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§ 63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that 40 CFR § 63.10(e)(3)(i) (C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

TAPCR 1200-03-09-.03(8)

Appendix 10: August 14, 1987, memorandum by John B. Rasnic of EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1987

OFFICE OF
AIR AND RADIATI

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

Commented [CZ18]: Appendix 10 is an outdated reference.

The citation referenced, 60.334(b)(2), no longer aligns with the conditions in the current version of NSPS GG. This reference aligns with the 1979 version of the rule. The current equivalent text is at 60.334(i)(2) and (i)(3). Furthermore, the purpose of this 1987 letter was to clarify that Regional EPA offices have the authority to approve custom fuel monitoring plans. It is understood today that they do have the authority. Lastly, this site is not relying on a custom fuel monitoring schedule since the turbine operates on pipeline quality natural gas.

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to SSCD for approval.

If you have any questions, please contact Sally M. Farrell at FTS 382-2875.

Attachment

cc: John Crenshaw
George Walsh
Robert Ajax
Earl Salo

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

2. Sulfur Monitoring

a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample anaylsis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

Appendix 11: April 28, 1997, Source Test Acceptance Letter

Compliance Validation Program Copy

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
9th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1531

April 28, 1997

Mr. Ted Wurfel
Environmental Scientist
Tenneco Energy
P. O. 2511
1010 Milam Street
Houston, Texas 77252-2511

Reference Number: 65-0028-01-S4 (Station 3110)

Dear Mr. Wurfel:

The Tennessee Division of Air Pollution Control has received the gaseous source test report submitted by Tenneco Energy for a Solar Saturn T-1360 gas-fired compressor turbine (Unit 3A) operated by East Tennessee Natural Gas and located in Morgan County (Station 3110). This source testing was conducted on November 20, 1996 by personnel of the Tenneco Energy Environmental, Health, Safety, and Technology Services. Pursuant to the United States Environmental Protection Agency (EPA) letter dated September 19, 1996, compliance testing could be waived for two of the three gas turbines that make up this fuel burning installation if one of the turbines was determined to have nitrogen oxides emissions of less than fifty percent of the applicable federal emission standard.

The source test report has been reviewed by the Compliance Validation Program. Based on this review it has been determined that the report is technically correct and thus, is acceptable to the agency. From the review of the source test report it was noted that the sampling methodology utilized followed the procedures outlined in EPA Source Test Method 20 (40 CFR 60, Appendix A) and the Tenneco testing protocol dated October 15, 1996.

In the review of the operational parameters presented in the report it was noted that the turbine operated very close to its designed power rating. Specifics of this are listed on Attachment 1 to this letter. Thus, the operation of this turbine was at an acceptable level for an official compliance demonstration.

During the testing period the measured nitrogen oxides emissions from Unit 3A were 55.6 ppm corrected to 15 percent oxygen and ISO standard conditions and 2.8 pounds per hour. The 55.6 ppm of nitrogen oxides corrected to 15 percent oxygen and ISO standard conditions demonstrates compliance with the regulatory nitrogen oxides emission standard of 150 ppm by volume at 15 percent oxygen and on a dry basis. This standard is set forth in Subparagraph 1200-3-16-.31 (3) (a) 2. of the Tennessee Air Pollution Control Regulations (40 CFR 60.332 (a) (2)). This also demonstrates compliance with the current permit stipulated nitrogen oxides emission limit of 84 ppm of nitrogen oxides corrected to 15 percent oxygen (Permit #741853F, Condition 5). In addition the 3.76 pounds per hour of nitrogen oxides demonstrates compliance with the current permit stipulated nitrogen oxides emission limit of 27.7 pounds per hour the three gas turbines that constitute this fuel burning installation (Permit #741853F, Condition 5).

The measured sulfur concentration value of the fuel being combusted in this turbine, less than one ppm sulfur, demonstrates that this turbine was demonstrating compliance with either the sulfur dioxide emission standard of 150 ppm by volume at 15 percent oxygen and on a dry basis or the maximum fuel sulfur content of 0.8 percent by weight. These standards are set forth in Paragraph 1200-3-16-.31 (4) of the Regulations (40 CFR 60.333). This also demonstrates compliance with the current permit stipulated sulfur dioxide emission limits of four ppm of sulfur dioxide corrected to 15 percent oxygen and on a dry basis and 1.47 pounds per hour (Permit #741853F, Condition 4).

The Division considers that this source test report is acceptable as a demonstration of compliance and from the data presented considers that this turbine has met the stipulated testing requirements and is in compliance with the applicable nitrogen oxides and sulfur dioxide emission standards. In addition, as the nitrogen oxides emission rate was less than fifty percent of the applicable federal emission standard, the testing requirement for the other two turbines located at this fuel burning installation is waived pursuant to the EPA letter dated September 19, 1996.

Mr. Ted Wurfel
Tenneco Energy
Station 3110 Unit 3A
April 28, 1996
page 3 of 3

If you have any questions concerning the matters addressed by this letter, please contact Mr. Jeryl W. Stewart at (615) 532-0605.

Sincerely,

Jeryl W. Stewart

for John W. Walton, P.E.
Technical Secretary
Tennessee Air Pollution Control Board

attachment - 1

cc: Knoxville Field Office

ATTACHMENT 1

Summary of Turbine Operation

Station 3110 Unit 3A

Test Date November 20, 1996

Turbine 3A heat input during test 13.9 MMBtu/hr

Rated heat input capacity for this turbine 14.45 MMBtu/hr
(from April 4, 1994 permit application)

Turbine 3A turbine horsepower during test 1,209 BHP

Rated turbine horsepower for this turbine 1,300 BHP
(from April 4, 1994 permit application)