

Part 70 Operating Permit Amendment

Permit Amendment No.: **4911-149-0004-V-02-1** Effective Date: **July 29, 2005**

Facility Name: **Tenaska Georgia Generating Station**

Facility Address 2100 George Brown Road
Franklin, Georgia 30217, Heard County

Mailing Address: 1044 North 115th Street, Suite 400
Omaha, Nebraska 68154

**Parent/Holding
Company:** Tenaska Georgia Partners, L.P.

Facility AIRS Number: 04-13-149-00004

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued an amendment to the Part 70 Operating Permit for:

Modification of Condition Nos. 5.2.2, 6.1.7, 6.2.3, and 6.2.11; Deletion of Condition 4.2.1; and Addition of Condition 8.14.4 based on Settlement Agreement of Permit Appeal.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 4911-149-0004-V-02-0. Unless modified or revoked, this Permit Amendment expires simultaneously with Part 70 Permit no. 4911-149-0004-V-02-0.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. TV-16070 dated August 4, 2004; any other applications upon which this Permit Amendment or Permit No. 4911-149-0004-V-02-0 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **6**, which pages are a part of this Permit Amendment, and which hereby become part of Permit No.4911-149-0004-V-02-0.

Director
Environmental Protection Division

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PART 4.0 REQUIREMENTS FOR TESTING

4.2 Specific Testing Requirements

4.2.1 Delete

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.2 Specific Monitoring Requirements

MODIFIED CONDITION

5.2.2 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.

[391-3-1-.02(6)(b)1(i) and 40 CFR 70.6(a)(3)(i)]

- a. The quantity of natural gas, in cubic feet, burned in each combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06). Data shall be recorded monthly.
- b. The quantity of fuel oil, in gallons, burned in each combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06). Data shall be recorded monthly.
- c. A system for continuously monitoring and recording the temperature at the power turbine inlet for each combustion turbine (Source Codes CT01, CT02, CT03, CT04, CT05, and CT06). This condition becomes effective 180 days after issuance of this permit amendment.
- d. The cumulative total hours of operation, during all periods of operation, for each combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06). Data shall be recorded monthly.

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS**6.1 General Record Keeping and Reporting Requirements**

MODIFIED CONDITION

- 6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported. [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
 - i. Any one-hour period during which the average NOx emission rate, determined in accordance with Condition 5.2.3, while firing natural gas, exceeds 15 ppmvd corrected to 15% oxygen for any combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06). [391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i); and 40 CFR 60.334(c)(1)(subsumed)]
 - ii. Any one-hour period during which the average NOx emission rate, determined in accordance with Condition 5.2.3, while firing fuel oil, exceeds 42 ppmvd corrected to 15% oxygen for any combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06). [391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i); and 40 CFR 60.334(c)(1)(subsumed)]
 - iii. Any time fuel oil combusted in any combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06), exceeds 0.05 percent sulfur by weight.
 - b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. Any three-hour period during which the average NOx emission rate, determined in accordance with Condition 5.2.5, exceeds 30 ppmvd at 15% oxygen for any combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06). This condition applies from May 1 through September 30 beginning in 2003. [391-3-1-.02(6)(b)1; 40 CFR 70.6(a)(3)(i); and 40 CFR 60.334(c)(1)(subsumed)]

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- ii. Any twelve consecutive month total NOx emissions which exceeds 1,788 tons for all combustion turbines (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06), on a combined basis.
 - iii. Any twelve consecutive month total fuel oil usage in the combustion turbines (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06) which exceeds 57,000,000 gallons.
 - iv. Any twelve consecutive month average hours of operation for the combustion turbines (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06) which exceeds 3,066 hours.
 - v. Any semiannual analysis of the natural gas combusted in any combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06) that exceeds 0.8 percent sulfur by weight.
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring).

- i. Any one-hour period, excluding periods of startup and shutdown, during which the average megawatt output of a combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06), firing natural gas, is less than the value derived from the following equation:

$$\text{Output} = 92.993 - 0.17058T$$

Where Output = average megawatt output of a combustion turbine
 T = one-hour average power turbine inlet temperature, as determined in accordance with Condition 5.2.2.c (deg F)

- ii. Any one-hour period, excluding periods of startup and shutdown, during which the average megawatt output of a combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, or CT06), firing fuel oil, is less than the value derived from the following equation:

$$\text{Output} = 95.613 - 0.14908T$$

Where Output = average megawatt output of a combustion turbine
 T = one-hour average power turbine inlet temperature, as determined in accordance with Condition 5.2.2.c (deg F)

- iii. Paragraphs i and ii of Condition 6.1.7.c become effective 180 days after issuance of this Permit amendment.

6.2 Specific Record Keeping and Reporting Requirements

MODIFIED CONDITIONS

- 6.2.3 The Permittee shall monitor the sulfur content of the fuel oil being fired in the combustion turbines on each occasion that fuel is transferred to the storage tank from any other source. The Permittee shall use one of the following methods to sample the fuel oil: sample from the storage tank after each addition of oil to the storage tank in accordance with Section 2.2.4.2 of 40 CFR Part 75 Appendix D; sample from the fuel lot in the shipment tank or container upon receipt of each oil delivery in accordance with Section 2.2.4.3 of 40 CFR Part 75 Appendix D; or sample from the fuel lot in the oil supplier's storage container in accordance with Section 2.2.4.3 of 40 CFR Part 75 Appendix D. [391-3-1-.02(6)(b)1, 40 CFR 60.334(b)(1), 40 CFR Part 75 Appendix D]

- 6.2.11 The Permittee shall submit a report of the following information for each semiannual period ending June 30 and December 31 of each year. The reports shall be postmarked by the 30th day following the end of the semiannual period (July 30 and January 30, respectively). [391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
 - a. The rolling twelve consecutive month total NOx emissions (in tons) from all combustion turbines (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06), on a combined basis, for each month in the reporting period.
 - b. The rolling twelve consecutive month fuel oil usage (in gallons) for the combustion turbines (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06), on a combined basis, for each month in the reporting period.
 - c. The rolling twelve consecutive month average hours of operation for each combustion turbine (Emission Unit ID Nos. CT01, CT02, CT03, CT04, CT05, and CT06), for each month in the reporting period.
 - d. The results of each sulfur content measurement in accordance with the revised condition 6.2.3 and 6.1.5. If no fuel oil has been received during the reporting period, the report should so state.

PART 8.0 GENERAL PROVISIONS

8.14 Compliance Requirements

NEW CONDITION

8.14.4 Excess Emissions

- a. Excess emissions resulting from startup, shutdown, or malfunction of any source which occur through ordinary diligence is employed shall be allowed provided that:
 - 1. [391-3-1-.02(2)(a)7(i)]
 - ii. The best operational practices to minimize emissions are adhered to;
 - iii. All associated air pollution control equipment is operated in a manner consistent with good air pollution control practice for minimizing emissions; and
 - iv. The duration of excess emissions is minimized.
- b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited and are violations of Chapter 391-3-1 of the Georgia Rules for Air Quality Control. [391-3-1-.02(2)(a)7(ii)]
- c. The provisions of this condition and Georgia Rule 391-3-1-.02(2)(a)7 shall apply only to those sources which are not subject to any requirement under Georgia Rule 391-3-1-.02(8) – New Source Performance Standards or any requirement of 40 CFR, Part 60, as amended concerning New Source Performance Standards. [391-3-1-.02(2)(a)7(iii)]