2.116 Electric Utility Steam Generation Units

2.116.1 Applicability

(a) This source category applies to affected facilities covered by the Georgia Rules for Air Quality Control (Georgia Rule) 391-3-1-.02(2)(jjj).

2.116.2 Compliance and Performance Testing for Nitrogen Oxides

(a) To determine compliance with the emission limits for nitrogen oxides under Georgia Rule 391-3-1-.02(2)(jjj), the owner or operator of an affected facility shall conduct the performance test as required under Section 1.2 using the continuous system for monitoring nitrogen oxides under Section 2.116.3.

(1) For the first performance test, nitrogen oxides from the affected unit(s) are monitored for 30 successive days and the 30-day average emission rate is used to determine compliance with the nitrogen oxides emission standards. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the first performance test is completed or is required to be completed under Section 1.2, whichever date comes first, the owner or operator of an affected facility shall determine compliance with the applicable nitrogen oxides emission standards on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each affected unit(s) each operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 operating days.

(3) Compliance with Georgia Rule 391-3-1-.02(2)(jjj) 1(ii), 2(ii), 3(ii), and 4(ii) shall be determined by use of the following procedure:

(i) Determine the hourly average heat input, HI, by use of the procedures of 40 CFR Part 75 Appendix F, Section 5*.

(ii) Determine the 30 day weighted average emission rate using the following equation:

$$\overline{E_{30day}} = \frac{\sum_{i=1}^{N}\sum_{i=1}^{H} E_i HI_i}{\sum_{i=1}^{N}\sum_{i=1}^{H} HI_i}$$

where:

$\overline{E_{30day}}$ = 30-day weighted average emission rate, lb $NO_x/10^6$ Btu

i = Hourly NO_x average emission rate, lb $NO_x/10^6$ Btu

HI_i = Hourly heat input for each unit(s), 10^6 Btu/hr

H = Total hours of data in the 30 day period for a unit(s)

N = Number of units or combination of units, as applicable, at all affected facilities.

(b) For the purposes of this section, an operating day shall be defined as a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the affected unit(s). It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

2.116.3 Emission Monitoring for Nitrogen Oxides

(a) The owner or operator of an affected facility subject to paragraph 2.116.1(a) shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides and either oxygen or carbon dioxide emissions discharged to the atmosphere and record the output of the system.

(b) The continuous monitoring systems required under paragraph (a) of this section shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

(c) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (a) of this section and required under 1.4(h) shall be expressed in lb/million Btu heat input and shall be used to calculate the average emission rates under 2.116.2(a)(3). The 1-hour averages shall be calculated using the data points required under 1.4(h). At least 2 data points must be used to calculate each 1-hour average.

(d) The procedures under Section 1.4 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) Except as provided in paragraph (d)(3), for affected facilities burning coal, oil, or natural gas, the span value for nitrogen oxides is determined as follows, unless otherwise approved by the Director:

Fuel	Span values for nitrogen oxides (PPM)
Natural gas	400
Oil	400
Coal	800
Mixtures	400 (x+y) + 800z

where:
x is the fraction of total heat input derived from natural gas,

y is the fraction of total heat input derived from oil, and

z is the fraction of total heat input derived from coal.

(2) All span values computed under paragraph (d)(1) of this section for burning combinations of regulated fuels are rounded to the nearest 200 ppm.

(3) The owner or operator may use the procedures of Part 75 Appendix A paragraph 2.1.2.1* to obtain different span values from those specified.

(e) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 or Method 7A of Appendix A of this text, other approved reference methods, or the procedures of 40 CFR 75 Subpart D* to provide emission data for a minimum of 75 percent of the operating hours in each unit operating day, in at least 22 out of 30 successive unit operating days.

2.116.4 Reporting and Recordkeeping Requirements

(a) The owner or operator of an affected facility subject to the nitrogen oxides standards shall maintain records of the following information for each day:

(1) Calendar date.

(2) The average hourly nitrogen oxides emission rates (expressed as NO_2) (lb/million Btu heat input), unless the affected facility was not in operation for the day.

(3) The 30-day average nitrogen oxides emission rates (lb/million Btu heat input) calculated at the end of each day from the measured hourly nitrogen oxide emission rates for the preceding 30 days.

(4) Identification of any days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under Georgia Rule 391-3-1-.02(2)(jjj)(1), (2), (3), and (4), with the reasons for such excess emissions as well as a description of corrective actions taken.

(5) Identification of any days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3 of this text.

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this text, or 40 CFR Part 75 Appendix B.

(b) The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under Section 2.116.3 shall submit a quarterly

report, which shall be postmarked by the 60th day following the end of each calendar quarter and containing the information recorded under paragraph (a) of this section, with the following exceptions:

(1) The information required under paragraph (a)(2); and

(2) For the information required under paragraph (a)(10), only the results of any daily calibration error tests or quarterly accuracy assessment that does not meet the applicable accuracy specification and the subsequent acceptable daily calibration error test or quarterly accuracy assessment shall be reported.

(c) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 5 years following the date of such record.

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* Code of Federal Regulations, Title 40, Part 75