

RULE 400.1 STATIONARY GAS TURBINE(S) - REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)
(Adopted 02/23/2010)

A. Applicability

- A.1 This rule limits emissions of oxides of nitrogen (NO_x) from Stationary Gas Turbine(s).
- A.2 This rule shall apply to any new or existing Stationary Gas Turbine(s) of 1 megawatt (MW) and/or larger, unless the equipment is exempt from this rule pursuant to Section D.
- A.3 Any Stationary Gas Turbine(s) subject to the provisions of this rule shall not be subject to Rule 400.

B. Definitions

Terms applicable to this rule are defined in Rule 101- Definitions and incorporated them to ICAPCD Rule 101 – Definitions.

C. Requirements

- C.1 Except as provided in Section D, the emission concentration of NO_x from a Stationary Gas Turbine(s) subject to this rule, calculated as nitrogen dioxide (NO₂) at 15% oxygen on a dry basis, shall not exceed the following:
- C.1.a 42 parts per million by volume (ppmv) when operated on a gaseous fuel.
- C.1.b 65 ppmv when operated on a liquid fuel.

D. Exemptions

- D.1 The provisions of this rule shall not apply to the following:
- D.1.a Any Stationary Gas Turbine(s) engine(s) or their components when operated exclusively for research, development or testing (except for source testing).
- D.2 The provisions of Section C shall not apply to the following:
- D.2.a Stationary Gas Turbine(s) which operate less than 400 hours per calendar year.

D.2.b Stationary Gas Turbine(s) during Startup, Shutdown or a change in load, when bringing the combustion process up to operating levels, may not exceed fifteen (15) minutes for simple cycle Stationary Gas Turbine(s) and two (2) hours for combined cycle and cogeneration cycle Stationary Gas Turbine(s), or as specified on the permit to operate.

D.3 Section C.1.b shall not apply to a Stationary Gas Turbine(s) while forced to burn nongaseous fuel during times of natural gas curtailment. This exemption shall not exceed 168 cumulative hours of operation per calendar year excluding equipment testing time not exceeding 24 hours per calendar year.

E. Recordkeeping

E.1 The owner or operator of a Stationary Gas Turbine(s) with a continuous emission monitoring system (CEMS) which has been installed to measure NO_x emissions pursuant to any federal regulation shall certify, calibrate and maintain the CEMS in accordance with applicable federal regulations including the reporting requirements of Sections 60.7(c), 60.7(d), and 60.13 of Title 40, Code of Federal Regulations Part 60 (40 CFR 60), performance specifications of Appendix B, quality assurance procedures of Appendix F, and a protocol approved in writing by the Air Pollution Control Officer (APCO).

E.2 The owner or operator of a Stationary Gas Turbine(s) subject to this rule shall maintain an operating log and record actual times and duration of all Startups, Shutdowns and fuel changes, and the type and quantity of each fuel used.

E.3 For the purposes of a compliance determination based on CEMS data, the averaging period to calculate NO_x emissions concentration shall be one clock hour.

F. Test Methods

F.1 Compliance with the NO_x emission limits in Section C shall be determined using United States Environmental Protection Agency (U.S. EPA) Method 7, 7A, 7C, 7E, California Air Resources Board (CARB) Method 100, or any other applicable EPA approved test method.

G. Compliance Testing

G.1 Any required source testing shall be performed at no less than 90% of the power rating. If an owner or operator of a Stationary Gas Turbine demonstrates to the satisfaction of the APCO that the Stationary Gas

Turbine cannot operate at these conditions, then emissions source testing shall be performed at the highest achievable continuous power rating.

G.2 Stationary Gas Turbine(s) subject to the requirements of Section C shall demonstrate compliance through emission compliance testing not less than once every 12 months. All emission rates shall be based on an hourly average. Frequency of compliance testing may be extended under the following:

G.2.a The frequency of compliance testing may be extended to not less than every 36 months for Stationary Gas Turbine(s) which operate less than 100 hours per 12 month period (as demonstrated by operational logs) and which emit less than 5 tons of NO_x per 12 month period.

G.2.b The frequency of compliance testing may be extended to not less than every five (5) years for secondary fuel testing for Stationary Gas Turbine(s) which operate less than 100 hours per 12 month period under this fuel (as demonstrated by operational logs) and which emit less than 5 tons of NO_x per 12 month period operating under secondary fuel. This period may be extended if a source can prove no secondary fuel has been fired

G.3 Test reports shall include the operational characteristics recommended by the manufacturer to ensure compliance with the applicable emission limits of this rule of a Stationary Gas Turbine(s) and of all add-on NO_x control systems.

G.4 For the purpose of a compliance determination based on source testing, the NO_x emissions concentration shall be calculated as an average of three test runs.

G.5 At least 30 days prior to the scheduled source test date, the owner or operator of a unit subject to this rule shall submit a source test plan to the APCO. At least seven days prior to the source test, the owner or operator shall notify the APCO of the exact date and time of the source test. A final source test result shall be submitted to the APCO within 60 days following the actual source test date.

H. Records Retention

H.1 The owner or operator of any Stationary Gas Turbine(s) subject to this rule shall maintain all records required by this rule for a minimum of two (2) calendar years. Title V facilities shall maintain these records for five (5) calendar years. These records shall be maintained on the premises and made available to the District upon request.