

**RULE 69.3 STATIONARY GAS TURBINE ENGINES**  
(Adopted and Effective 9/27/94)

(a) **APPLICABILITY**

This rule shall apply to any existing stationary gas turbine engine with a power rating of 1.0 megawatt (MW) or greater, or to any new stationary gas turbine engine with a power rating of 0.3 MW or greater. Any unit subject to this rule shall not be subject to Rule 68.

(b) **EXEMPTIONS**

(1) The provisions of this rule shall not apply to the following:

(i) Any gas turbine engine when operated exclusively for the research, development or testing of gas turbine engines or their components.

(ii) Any portable gas turbine engine located at a stationary source 180 days or less in a consecutive 12-month period. It is the responsibility of any person claiming this exemption to maintain records indicating the dates that such turbine was located at a stationary source. These records shall be maintained for a minimum of two calendar years by the owner of such turbine and made available to the District upon request.

(iii) New gas turbines with a power rating less than or equal to 0.4 MW used in conjunction with military tactical deployable equipment operated at military sites, provided that operations do not exceed 1000 hours per calendar year. It is the responsibility of any person claiming this exemption to maintain records indicating the hours that such turbine was operated. These records shall be maintained for a minimum of two calendar years by the owner of such turbine and made available to the District upon request.

(2) The provisions of Section (d) shall not apply to the following:

(i) Any emergency unit provided that operation for maintenance purposes to ensure operability in the event of an emergency situation does not exceed 80 hours per calendar year. It is the responsibility of any person claiming this exemption to maintain records in accordance with Subsections (e)(2) and (e)(6) of this rule.

(ii) Any unit during startup, shutdown or a fuel change for a period not to exceed 120 continuous minutes. It is the responsibility of any person claiming this exemption to maintain records in accordance with Subsections (e)(3) and (e)(6) of this rule. Nothing in this rule shall be construed to limit the actual time needed to conduct a startup, shutdown or fuel change.

(c) **DEFINITIONS**

For the purposes of this rule, the following definitions shall apply:

- (1) **"Emergency Situation"** means any one of the following:
  - (i) an unforeseen electrical power failure of the serving utility or of onsite electrical transmission equipment; or
  - (ii) an unforeseen flood, fire or life-threatening situation.

Emergency situation shall not include operation of any unit for training purposes or other foreseeable event, or operation of any peaking unit for the purpose of supplying power for distribution to an electrical grid.

- (2) **"Emergency Unit"** means a stationary gas turbine engine used only in the event of an emergency situation. A peaking unit shall not be considered an emergency unit.
- (3) **"Existing" or "Existing Unit"** means any stationary gas turbine engine which was installed and operating in San Diego County on or before September 27, 1994.
- (4) **"Fuel Change"** means the transitory operating period when a switch occurs between liquid or gaseous fuels, or any combination thereof.
- (5) **"Gaseous Fuel"** means natural gas, digester gas, landfill gas, methane, ethane, propane, butane, or any gas stored as liquids at high pressure such as liquefied petroleum gas.
- (6) **"Liquid Fuel"** means distillate oils, kerosene and jet fuel.
- (7) **"Military Tactical Deployable Equipment"** means equipment operated by the United States armed forces or National Guard which is designed specifically for military use in an off-road, dense terrain and/or hostile environment or on board military combat vessels and is capable of being moved from one location to another. This equipment requires the ability to perform in a uniform manner with a minimum amount of maintenance which has been standardized throughout the United States military and/or NATO forces.
- (8) **"New" or "New Unit"** means a stationary gas turbine engine installed in San Diego County after September 27, 1994.
- (9) **"Peaking Unit"** means a stationary gas turbine engine that is operated intermittently for generation of electric power during periods of high energy demand.

(10) **"Portable Gas Turbine Engine"** means a gas turbine which is designed and equipped to be easily movable and, as installed, easily capable of being moved from one stationary source to another, as determined by the Air Pollution Control Officer. Portable gas turbine engines are periodically moved and may not be located more than 180 days at any one stationary source within any consecutive 12-month period. Days when portable gas turbine engines are stored in a designated holding or storage area shall not be counted towards the 180-day limit, provided the gas turbine engine was not operated on that calendar day except for maintenance and was in the designed holding area the entire calendar day.

(11) **"Power Augmentation"** means an increase in the gas turbine engine shaft output, or a decrease in turbine fuel consumption, by the addition of energy recovered from exhaust heat.

(12) **"Power Rating"** means the maximum, continuous power output of a unit, in megawatts (MW) or equivalent, as certified by the manufacturer unless limited by a condition in a District Authority to Construct or a Permit to Operate. Power augmentation shall not be included in power rating.

(13) **"Shutdown"** means to cease operation of a unit and includes the amount of time needed to safely do so.

(14) **"Stationary Gas Turbine Engine"** means any gas turbine engine system, with or without power augmentation, which is permanently attached to a foundation, or is not a portable gas turbine. Two or more gas turbines powering a common shaft shall be treated as one gas turbine.

(15) **"Stationary Source"** means the same as is defined in Rule 20.1.

(16) **"Startup"** means to begin operation of a unit and includes the amount of time needed for a unit and ancillary equipment to achieve stable operation.

(17) **"Unit"** means any stationary gas turbine engine.

(d) **STANDARDS**

(1) The emissions concentration of oxides of nitrogen (NO<sub>x</sub>) from any unit subject to this rule, calculated as nitrogen dioxide at 15% oxygen on a dry basis, shall not exceed the following:

- (i) 42 parts per million by volume (ppmv) when operated on a gaseous fuel.
- (ii) 65 parts per million by volume (ppmv) when operated on a liquid fuel.

(e) **MONITORING AND RECORDKEEPING REQUIREMENTS**

(1) An owner or operator of a unit which is subject to the requirements of Section (d) shall install continuous monitors to allow for monitoring of the operational characteristics of the unit and of any NO<sub>x</sub> emissions reduction system, as applicable, to demonstrate continuous compliance, such as:

- (i) exhaust gas flow rate;
- (ii) exhaust gas temperature;
- (iii) ammonia injection rate;
- (iv) water injection rate; and
- (v) stack-gas oxygen content.

(2) An owner or operator of an emergency unit shall maintain an operating log and record the hours of operation for maintenance purposes and during an emergency situation. At a minimum, these records shall include the dates and actual times and duration of all startups and shutdowns, total cumulative annual hours of operation for maintenance purposes, and a description of any emergency situation.

(3) An owner or operator of any unit 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 of fuel used.

(4) Continuous monitors shall be installed, calibrated and maintained in accordance with applicable federal regulations and a protocol approved in writing by the Air Pollution Control Officer.

(5) For any existing unit, continuous emissions monitors which have been installed to measure NO<sub>x</sub> emissions pursuant to any federal regulation shall be certified, calibrated and maintained in accordance with applicable federal regulations and a protocol approved in writing by the Air Pollution Control Officer.

(6) The owner or operator of any unit subject to this rule shall maintain all records required by Section (e) for a minimum of three calendar years. These records shall be maintained on the premises and made available to the District upon request.

(f) **TEST METHODS**

(1) To determine compliance with Section (d), measurement of oxides of nitrogen and stack-gas oxygen content shall be conducted in accordance with ARB Test Method 100, as approved by the U.S. Environmental Protection Agency (EPA).

(2) The averaging period to calculate NO<sub>x</sub> emissions concentration shall be any thirty consecutive minute period.

(3) Measurements of emissions concentrations shall not include calibration or span check measurements of the emissions testing equipment.

**(g) SOURCE TEST REQUIREMENTS**

(1) Source testing shall be performed at no less than 80% of the power rating. If an owner or operator of an existing turbine demonstrates to the satisfaction of the Air Pollution Control Officer that the turbine cannot operate at these conditions, then emissions sources testing shall be performed at the highest achievable continuous power rating.

(2) A unit subject to the requirements of Section (d) shall be tested for compliance at least once every 12 months, unless otherwise specified in writing by the Air Pollution Control Officer. Testing shall be conducted in accordance with Section (f) and a source test protocol approved in writing by the Air Pollution Control Officer. Test reports shall include the operational characteristics, as described in Subsection (e)(1), of the unit and of all add-on NO<sub>x</sub> control systems.

**(h) COMPLIANCE SCHEDULE**

(1) An owner or operator of an existing unit shall be in compliance with all applicable provisions of this rule no later than May 31, 1995.

(2) Any person installing a new unit subject to the provisions of this rule shall comply with all applicable provisions of this rule upon initial installation and commencement of operation.