PROPOSED RULE 429.2 STARTUP AND SHUTDOWN EXEMPTION PROVISIONS FOR OXIDES OF NITROGEN FROM ELECTRICITY GENERATING FACILITIES

[Rule index to be included after amendment]

(a) Purpose

The purpose of this rule is to provide an exemption from Rule 1135 emission limits during periods of when units regulated under Rule 1135 are starting up and shutting down and establish requirements during startup and shutdown events.

(b) Applicability

This rule shall apply to the owner or operator of electric generating units at electricity generating facilities.

(c) Definitions

(1) BOILER COLD START means the condition of a boiler startup occurring after a boiler has been shut down for 120 hours or more.

(2) BOILER NON-COLD START means the condition of a boiler startup occurring after a boiler has been shut down for less than 120 hours or put in hot standby.

(3) ELECTRIC GENERATING UNIT is as defined in Rule 1135 – Emissions of Oxides of Nitrogen from Electricity Generating Facilities, which includes boilers, combined cycle gas turbines, duct burners, simple cycle gas turbines, and internal combustion engines, as defined in Rule 1135.

(4) ELECTRICITY GENERATING FACILITY is as defined in Rule 1135.

(5) MINIMUM OPERATING TEMPERATURE means the minimum operating temperature specified by the manufacturer, or as otherwise defined in the South Coast AQMD Permit to Construct or Permit to Operate.

(6) NO_x POST-COMBUSTION CONTROL EQUIPMENT means air pollution control equipment which eliminates, reduces, or controls the issuance of NO_x downstream of combustion.

(7) OXIDES OF NITROGEN (NO_x) EMISSIONS is as defined in Rule 1135.

(8) SCHEDULED STARTUP means a planned startup that is specified by January 1 of each year. A scheduled startup does not include a startup to meet energy demand, perform unplanned maintenance, or correct equipment failure, breakdown, or malfunction.

(9) SHUTDOWN means the time period that begins when an electric generating unit begins reducing load and the flue gas temperatures fall below the minimum operating temperature of the NO_x post-combustion control equipment, if applicable, and ends in a period of zero fuel flow.

(10) STABLE CONDITIONS means that the fuel flow to an electric generating unit is consistent and allows for normal operations.

(11) STARTUP means the time period beginning when an electric generating unit begins combusting fuel after a period of zero fuel flow.

(d) Requirements

(1) An owner or operator of an electric generating unit is not subject to the Rule 1135 emission limits during the startup and shutdown time allowed pursuant to paragraph (d)(2).

(2) On and after January 1, 2024, an owner or operator of an electric generating unit installed prior to [DATE OF ADOPTION] shall limit the duration of startups and shutdowns to the times specified in Table 1: Startup and Shutdown Duration Limits for Electric Generating Units Installed Prior to [DATE OF ADOPTION] or the times specified in the Permit to Construct or Permit to Operate, whichever is more stringent.

Table 1: Startup and Shutdown Duration Limits for Electric Generating Units Installed Prior to [DATE OF ADOPTION]

Equipment Type	Time Allowance	
	Startup	**Shutdown**
Boiler	Boiler Cold Start: 24 hours	12 hours
	Boiler Non-Cold Start: 12 hours	
Combined Cycle Gas Turbine and Associated Duct Burner	6 hours	2 hours
Simple Cycle Gas Turbine	1 hour	45 minutes
Diesel Internal Combustion Engines	1 hour	30 minutes

(3) An owner or operator of an electric generating unit installed on or after [DATE OF ADOPTION] shall limit the duration of startups and shutdowns to the times specified in Table 2: Startup and Shutdown Duration Limits for Electric Generating Units Installed On or After [DATE OF ADOPTION] or the times specified in the Permit to Construct or Permit to Operate, whichever is more stringent.

Table 2: Startup and Shutdown Duration Limits for Electric Generating Units Installed On or After [DATE OF ADOPTION]

Equipment Type	Time Allowance	
	Startup	Shutdown
Combined Cycle Gas Turbine and Associated Duct Burner	60 minutes	30 minutes
Simple Cycle Gas Turbine	15 minutes	10 minutes
Diesel Internal Combustion Engines	30 minutes	30 minutes

(4) On and after January 1, 2024, an owner or operator of an electric generating unit shall not allow any startup to last longer than the time that is necessary to reach stable conditions and minimum operating temperature of the NO_x post-combustion control equipment, if applicable. If a unit reaches stable conditions and the minimum operating temperature of the NOx post-combustion control equipment is reached before reaching the startup duration limit specified in paragraphs (d)(2) or (d)(3), the startup period shall be considered over.

(5) On and after January 1, 2024, an owner or operator of an electric generating unit shall not exceed two scheduled startups per calendar year for each electric generating unit.

(6) An owner or operator of an electric generating unit shall take all reasonable and prudent steps to minimize emissions during startup and shutdown.

(7) On and after January 1, 2024, an owner or operator of an electric generating unit with NOx post-combustion control equipment shall install and maintain

an annually calibrated temperature measuring device at the inlet of the NO_x post-combustion control equipment.

(8) On and after January 1, 2024, an owner or operator of an electric generating unit with NO_x post-combustion control equipment shall operate the NO_x post-combustion control equipment, including the injection of any associated chemical reagent(s) into the exhaust stream to control NO_x, if the temperature of the exhaust gas to the inlet of the NO_x post-combustion control equipment is greater than or equal to the minimum operating temperature and the temperature is stable.

(e) Recordkeeping

(1) On and after January 1, 2024, an owner or operator of an electric generating unit shall maintain the following records on-site for 5 years and make this information available to South Coast AQMD upon request:

(A) A list of scheduled startups, including date, time, and reason of the scheduled startup and any change(s) to the date and time of the scheduled startup;

(B) An operating log for each startup and shutdown, which contains the date, time, duration, and reason for each event; and

(C) NO_x emissions data collected with a certified Continuous Emissions Monitoring System (CEMS) pursuant to Rule 1135 subdivision (e) for each startup and shutdown.

(2) On and after January 1, 2024, an owner or operator of an electric generating unit with NO_x post-combustion control equipment shall maintain on-site documentation from the manufacturer of the minimum operating temperature of the NO_x post-combustion control equipment and make this information available to the South Coast AQMD upon request, unless the Permit to Construct or Permit to Operate specifies the required minimum operating temperature of the NOx post-combustion control equipment.

(f) Exemptions

(1) Once-Through-Cooling Electric Generating Units to Be Retired

Until December 31, 2029, the owner or operator of an electric generating unit subject to the Clean Water Act Section 316(b) that will retire the unit on or before the compliance date set forth in Table 1 of Section 2(B) of the State Water Resources Control Board's Statewide Water Quality Control Policy on the Use of Coastal Estuarine Waters for Power Plant Cooling (Once-Through-Cooling Policy) implementing Section 316(b) of the Clean Water Act, shall not be subject to paragraphs (d)(2), (d)(5), and (d)(7), for that electric generating unit, provided that the owner or operator meets the requirements specified in Rule 1135 paragraph (g)(2).