(Adopted August 4, 1989)(Amended December 21, 1990)(Amended July 19, 1991)
(Amended November 2, 2018)(Amended January 7, 2022)(Amended TBD)

PROPOSED AMENDED RULE 1135. EMISSIONS OF OXIDES OF NITROGEN FROM ELECTRICITY GENERATING FACILITIES

(a) Purpose

The purpose of this rule is to reduce emissions of oxides of nitrogen (NOx) from electric generating units at electricity generating facilities.

(b) Applicability

This rule shall apply to electric generating units at electricity generating facilities.

(c) Definitions

(1) ANNUAL CAPACITY FACTOR means the ratio between the measured heat input (in MMBtu) from fuel consumption to an electric generating unit during a calendar year and the potential heat input (in MMBtu) to the electric generating unit had it been operated for 8,760 hours during a calendar year at the permitted heat input rating, expressed as a percent. Annual capacity factor does not include heat input of the electric generating unit during an Emergency Phase of the California Energy Commission Energy Emergency Response Plan or a Governor-Declared State of Emergency or Energy Emergency.

(2) ANNUAL NOx MASS EMISSIONS means actual emissions of NOx produced from all electric generating units at an electricity generating facility between January 1st through December 31st.

(~~2~~3) BACKUP UNIT means any NOx emitting turbine which is used intermittently to produce energy on a demand basis, does not operate more than 1,300 hours per year, is not subject to 40 Code of Federal Regulations (CFR) Part 72, and was a NOx process unit prior to the facility becoming a former RECLAIM NOx facility.

(~~3~~4) BOILER means any combustion equipment fired with liquid and/or gaseous fuel, which is primarily used to produce steam that is expanded in a turbine generator used for electric power generation.

(~~4~~5) COGENERATION TURBINE means a gas turbine which is designed to generate electricity and useful heat energy at the same time (combined heat and power).

(~~5~~6) COMBINED CYCLE GAS TURBINE means a gas turbine that recovers heat from the gas turbine exhaust gases for use in a heat recovery steam generator to generate additional electricity.

(c) (~~6~~7) DAILY means a calendar day starting at 12 midnight and continuing through 11:59 p.m.

(~~7~~8) DUCT BURNER means a device located in the heat recovery steam generator of a gas turbine that combusts fuel and adds heat energy to the turbine exhaust to increase the output of the heat recovery steam generator.

(~~8~~9) ELECTRIC GENERATING UNIT means a boiler that generates electric power, a gas turbine that generates electric power with the exception of cogeneration turbines, or ~~a diesel internal combustion engine~~equipment that generates electric power and is located on Santa Catalina Island. An electric generating unit does not include ~~with the exception of~~ emergency internal combustion engines and portable engines registered under the California Air Resources Board Statewide Portable Equipment Registration Program (PERP).

(~~9~~10) ELECTRICITY GENERATING FACILITY means a facility that is owned or operated by an investor-owned electric utility or a publicly owned electric utility and has one or more electric generating units; or has electric generating units with a combined generation capacity of 50 ~~megawatts~~Megawatts (MW) or more of electrical power for distribution in the state or local electrical grid system. Electricity generating facility does not include facilities subject to South Coast AQMD Rule 1109.1 – Emissions of Oxides of Nitrogen from Petroleum Refineries and Related Operations, South Coast AQMD Rule 1150.3 – Emissions of Oxides of Nitrogen from Combustion Equipment at Landfills, or South Coast AQMD Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities.

(~~10~~11) EMISSION CAP is calculated as the total daily NOx emissions in pounds from all boilers at an electricity generating facility, expressed in pounds of NOx.

(~~11~~12) EMISSION RATE is calculated as the total daily NOx emissions in pounds from all boilers at an electricity generating facility, divided by the total daily

net electric power generated and/or obtained in Megawatt-Hours from all boilers at an electricity generating facility, expressed in pounds of NOx per Megawatt-Hour.

(c) (~~12~~13) FORCE MAJEURE NATURAL GAS CURTAILMENT means:

(A) An interruption in natural gas service due to unavoidable or unforeseeable failure, malfunction, or natural disaster, not resulting from an intentional or negligent act or omission on the part of the owner or operator of an electric generating unit; or

(B) A supply restriction resulting from the application of a California Public Utilities Commission priority allocation system of Southern California Gas Company Tariff Rule 23, such that the daily fuel needs of an electric generating unit cannot be met with the natural gas available.

(~~13~~14) FORMER RECLAIM NOx FACILITY means a facility or any of its successors that was in the NOx Regional Clean Air Incentives Market (RECLAIM) as of January 5, 2018, as established in Regulation XX – Regional Clean Air Incentives Market (RECLAIM) (Regulation XX), that has received a final determination notification, and is no longer in the NOx RECLAIM program.

(~~14~~15) INTERNAL COMBUSTION ENGINE means a reciprocating~~--~~type engine in which the combustion of a fuel occurs with an oxidizer (usually air) in a combustion chamber to produce mechanical energy.

(~~15~~16) INVESTOR-OWNED ELECTRIC UTILITY means a business organization managed as a private enterprise that operates electric generating unit(s) for electric power distribution primarily in the grid system overseen by the California Public Utilities Commission.

(~~16~~17) NON-RECLAIM NOx FACILITY means a facility or any of its successors that was not in the NOx RECLAIM as of January 5, 2018, as established in Regulation XX.

(~~17~~18) OXIDES OF NITROGEN (NOx) EMISSIONS means the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.

(~~18~~19) PUBLICLY OWNED ELECTRIC UTILITY means a special-purpose district or other jurisdiction, including municipal districts or municipalities,

that operates electric generating unit(s) for electric power distribution, either partially or totally, to residents of that district or jurisdiction.

(~~19~~20) RECLAIM NOx FACILITY means a facility or any of its successors that is in the NOx RECLAIM as of January 5, 2018, as established in Regulation XX and is still in RECLAIM on the relevant date.

(21) SANTA CATALINA ISLAND NEAR-ZERO EMISSION (NZE) ELECTRIC GENERATING UNIT means any electric generating unit located on Santa Catalina Island that produces NOx emissions greater than 0.01 pounds per MW-hr (lb/MW- hr) but less than or equal to 0.07 lb/MW-hr as demonstrated by a South Coast AQMD permit condition or other method determined to be equivalent by the Executive Officer.

(22) SANTA CATALINA ISLAND ZERO-EMISSION (ZE) ELECTRIC GENERATING UNIT means any electric generating unit located on Santa Catalina Island that produces NOx emissions less than 0.01 lbs/MW-hr as demonstrated by a South Coast AQMD permit condition or other method determined to be equivalent by the Executive Officer.

(~~20~~23) SHUTDOWN is as defined in South Coast AQMD Rule 429.2 – Startup and Shutdown Exemption Provisions for Oxides of Nitrogen from Electricity Generating Facilities (Rule 429.2).

(~~21~~24) SIMPLE CYCLE GAS TURBINE means any stationary combustion turbine that does not recover heat from the combustion turbine exhaust gases to heat water or generate steam.

(~~22~~25) STARTUP is as defined in South Coast AQMD Rule 429.2.

(~~23~~26) TUNING means adjusting, optimizing, rebalancing, or other similar operations to an electric generating unit or an associated control device or as otherwise defined in the Permit to Operate. Tuning does not include normal operations to meet load fluctuations.

(d) ~~Emissions~~Emission Limits

(1) Emission Limits for Boilers and Gas Turbines

On and after January 1, 2024, the owner or operator of an electricity generating facility shall not operate a boiler or gas turbine in a manner that exceeds the NOx emission limits listed in Table 1: Emission Limits for Boilers and Gas Turbines, where:

(A) Boilers and gas turbines for which the owner or operator has applied for Permits to Construct after November 2, 2018 shall average the NOx emission limits in Table 1 over a 60-minute rolling average.

(B) Boilers and gas turbines installed or for which the owner or operator has applied for Permits to Construct prior to November 2, 2018 shall:

(i) Average the NOx emission limits in Table 1 over a 60-minute rolling average; or

(ii) Retain the averaging time requirements specified in the Permit to Operate as of November 2, 2018.

Table 1: Emission Limits for Boilers and Gas Turbines

Equipment Type	NO_x (ppmv)	Oxygen Correction (%, dry)
Boiler	5	3
Combined Cycle Gas Turbine and Associated Duct Burner	2	15
Simple Cycle Gas Turbine	2.5	15

(d) (2) Electric Generating Units Located on Santa Catalina Island

The owner or operator of an electricity generating facility located on Santa Catalina Island with ~~diesel internal combustion engines~~ electric generating units shall:

(A) ~~By January 1, 2024, meet a mass emission limit from all electric generating units of 50 tons of NOx annually, including mass emissions from startups and shutdowns;~~Not install more than three new diesel internal combustion engines;

(B) Not install any new diesel internal combustion engines after ~~January 1, 2024~~January 1, 2028;~~. A diesel internal combustion engine undergoing reconstruction as defined in 40 CFR Part 60.15 or Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines shall not be considered as a new diesel internal combustion engine installation for the purposes of this subparagraph;~~

(C) Not install any equipment that does not meet the definition of a Santa Catalina Island NZE electric generating unit or a Santa Catalina Island ZE electric generating unit after January 1, 2028;

(D) Install Santa Catalina Island NZE electric generating units and/or Santa Catalina Island ZE electric generating units by January 1, 2030 with a minimum cumulative rating of 2 MW, excluding:

(i) The highest rated Santa Catalina Island NZE electric generating unit and/or Santa Catalina Island ZE electric generating unit;

(ii) Solar photovoltaic cells; and

(iii) Battery storage;

(~~C~~E) ~~By January 1, 2025, meet a~~Meet the annual NOx mass emission ~~limit~~limits specified in Table 2: Emission Limits for Electric Generating Units Located on Santa Catalina Island ~~from~~for all electric generating units ~~of 45 tons of NOx annually~~, including mass emissions from startups and shutdowns, and missing data substitutions pursuant to South Coast AQMD Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications (Rule 218.3) and South Coast AQMD Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions (Rule 2012); and

Table 2: Emission Limits for Electric Generating Units Located on Santa Catalina Island

Rule Reference	Compliance Date	NOx (tons per year)
(d)(2)(E)(i)	January 1, 2027	45
(d)(2)(E)(ii)	January 1, 2028	30
(d)(2)(E)(iii)	January 1, 2030	13
(d)(2)(E)(iv)	January 1, 2035	6

(~~D~~F) ~~On and after January 1, 2026, meet a mass emission limit from all electric generating units of 13 tons of NOx annually, including mass emissions from startups and shutdowns.~~ Remove all prime power diesel internal combustion engines for which installation was

completed earlier than [*Date of Adoption*] from service by January 1, 2030.

(3) Technology Assessments for Electric Generating Units Located on Santa Catalina Island

By January 1, 2028, the Executive Officer shall conduct a technology assessment and report to the Governing Board if the NOx emission limits in clauses (d)(2)(E)(iii) and (d)(2)(E)(iv) represent BARCT.

(A) If the Executive Officer determines that the NOx emission limits specified in clauses (d)(2)(E)(iii) and (d)(2)(E)(iv) represent BARCT, the owner or operator of an electricity generating facility located on Santa Catalina Island shall meet the NOx limits specified in clauses (d)(2)(E)(iii) and (d)(2)(E)(iv) by the applicable compliance dates.

(B) If the technology assessment specified in this paragraph demonstrates that more stringent BARCT requirements are applicable, the Executive Officer shall initiate rule development for the implementation schedule of the more stringent BARCT requirements within six months after the technology assessment.

(~~3~~4) ~~Emissions~~Emission Limits for Diesel Internal Combustion Engines

(A) The owner or operator of an electricity generating facility located on Santa Catalina Island shall not operate a new diesel internal combustion engine that is installed to meet the mass emission limits specified in ~~subparagraphs (d)(2)(A), (d)(2)(C) and (d)(2)(D)~~subparagraph (d)(2)(E) in a manner that exceeds the NOx, carbon monoxide, volatile organic compounds, and particulate matter emissions limits listed in Table ~~2~~3: ~~Emissions~~Emission Limits for Diesel Internal Combustion Engines.

(B) Diesel internal combustion engines installed prior to November 2, 2018 may retain the averaging time requirements specified in the Permit to Operate as of November 2, 2018.

Table ~~2~~3: ~~Emissions~~Emission Limits for Diesel Internal Combustion Engines

NO_x (ppmv)[1]	Carbon Monoxide (ppmv)[2]	Volatile Organic Compounds (ppmv)[3]	Particulate Matter (lbs/MMbtu)[4]
45	250	30	0.0076

[1] – Corrected to 15% oxygen on a dry basis and averaged over a three-hour rolling average using hourly averages computed in accordance with ~~South Coast Rule 218.3 – Continuous Emission Monitoring System: Performance Specifications (~~Rule 218.3~~)~~.

[2]– Corrected to 15% oxygen on a dry basis and averaged over 15 minutes

[3]– Measured as carbon, corrected to 15% oxygen on a dry basis, and averaged over sampling time required by the test method

[4]– Applies to both filterable and condensable particulate matter

(d) (4<u>5</u>) Time Extension

(A) The owner or operator of an electricity generating facility on Santa Catalina Island may submit a request to the Executive Officer for a time extension of up to ~~three~~two years to meet the mass emission ~~limit~~limits specified in ~~subparagraph (d)(2)(D)~~ clauses (d)(2)(E)(iii) and (d)(2)(E)(iv) provided the owner or operator:

(i) Submits the request to the Executive Officer at least 365 days before the compliance ~~deadline~~deadlines specified in ~~subparagraph (d)(2)(D)~~ clauses (d)(2)(E)(iii) and (d)(2)(E)(iv); and

(ii) The request includes:

(~~A~~I) Identification of the electric generating units for which a time extension is needed;

(~~B~~II) The reason(s) a time extension is needed;

(~~C~~III) Progress of replacing or retrofitting the electric generating units;

(~~D~~IV) A description of the technology or technologies that will be used to achieve the mass emission limit; and

(~~E~~V) The length of time requested.

(B) The Executive Officer will approve or disapprove the request for a time extension. Approval or disapproval will be based on the following criteria:

(d) (4~~5~~) (B) (i) The owner or operator prepared the request for a time extension in compliance with subparagraph (d)(4~~5~~)(A); and

(ii) The owner or operator provided sufficient details identifying the reason(s) a time extension is needed that demonstrates to the Executive Officer that there are extenuating circumstances due to unforeseen construction interruptions and/or supply chain disruptions that necessitate additional time to complete implementation. ~~Such a demonstration may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, land acquisition contracts, permit applications, and purchase orders.~~

(C) If the Executive Officer approves the request for a time extension, the owner or operator shall pay a mitigation fee within 30 days of the date of approval. The mitigation fee shall be $100,000/year, or any portion of a year, after the compliance date specified in ~~subparagraph (d)(2)(D)~~ clauses (d)(2)(E)(iii) and (d)(2)(E)(iv).

(~~5~~6) Startup, Shutdown, and Tuning Requirements

The NOx emission limits in Table 1 and the NOx, carbon monoxide, and volatile organic compounds ~~emissions~~emission limits in Table ~~2~~3 shall not apply during startup and shutdown, pursuant to Rule 429.2, or tuning, if limitations for duration and number of tunings are included in the Permit to Operate.

(~~6~~7) City of Glendale

(A) Until compliance with the provisions pursuant to paragraph (d)(1) is achieved, the City of Glendale or any of its successors, shall not operate its boilers unless at least one of the following is met:

(i) Emission rate of 0.20 pounds of NOx per net Megawatt-Hour. NOx emissions during startups and shutdowns of boilers, up to a maximum of 12 hours for each event, shall not be included in the determination of the emissions rate if five or fewer boilers are in operation during this period; or

(ii) Emission cap of 390 pounds of NOx per day.

(B) Until compliance with paragraph (d)(1) is achieved, the City of Glendale shall not emit total quantities of NOx from all boilers in excess of 35 tons of NOx per calendar year. If Grayson combined cycle gas turbine Unit 8BC cannot produce electricity because of a breakdown for 30 continuous days or more, the annual NOx ~~emissions~~emission limit shall be increased by 65 pounds per day, up to a maximum of 41 tons per year

(d) (~~6~~7) (C) A violation of any requirement specified in subparagraph (d)(~~6~~7)(A) or (d)(~~6~~7)(B) shall constitute a violation of this rule for every applicable unit operating during the exceedance period.

~~(7) On or before July 1, 2022, the owner or operator of a RECLAIM NOx facility or former RECLAIM NOx facility, excluding the owner or operator of an electricity generating facility on Santa Catalina Island, shall submit an application for a change of permit conditions to reconcile their permit(s) with Rule 1135.~~

~~(8) On or before January 1, 2023, the owner or operator of an electricity generating facility on Santa Catalina Island shall submit an application for a change of permit conditions to reconcile their permit(s) with Rule 1135 or for a Permit to Construct(s) to comply with paragraphs (d)(2) and (d)(3).~~

~~(9) On or before January 1, 2023, the owner or operator a non-RECLAIM NOx facility shall submit an application for a change of permit conditions to reconcile their permit(s) with Rule 1135.~~

(e) Monitoring, Recordkeeping, and Reporting

(1) RECLAIM NO_x Facility

The owner or operator of each RECLAIM NOx facility subject to Rule 1135 shall comply with ~~South Coast AQMD~~ Rule 2012~~, Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions~~ to demonstrate compliance with the NOx emission limits of this rule, except as provided in paragraph (e)(3).

(2) Former RECLAIM NO_x and Non-RECLAIM NO_x Facilities

The owner or operator of each former RECLAIM NOx facility and non-RECLAIM NOx facility, shall comply with South Coast AQMD Rule 218 – Continuous Emission Monitoring (Rule 218), South Coast AQMD Rule 218.1 – Continuous Emission Monitoring Performance Specifications (Rule

218.1), South Coast AQMD Rule 218.2 – Continuous Emission Monitoring System: General Provisions (Rule 218.2), ~~South Coast AQMD~~ Rule 218.3 ~~– Continuous Emission Monitoring System: Performance Specifications~~, and 40 CFR Part 75 to demonstrate compliance with the NOx emission limits of this rule, except as provided in paragraph (e)(3) .

(3) The owner or operator of a Santa Catalina Island NZE electric generating unit ≤ 4MW or a Santa Catalina Island ZE electrical generating unit is not required to install or operate a CEMS.

(4) The owner or operator of an NZE electric generating unit located on Santa Catalina Island shall determine the annual NOx mass emissions to demonstrate compliance with subparagraph (d)(2)(E) by utilizing the following method:

(A) Measure and record the Megawatt-Hours of each Santa Catalina NZE electric generating unit ≤ 0.4 Megawatts;

(B) Multiply the total annual Megawatt-Hours from all Santa Catalina Island NZE electric generating units ≤ 0.4 Megawatts by the emission factor of 0.07 lbs/Megawatt-Hour and convert to tons per year; and

(C) Sum the total annual NOx mass emissions of all Santa Catalina Island NZE electric generating units ≤ 0.4 Megawatts to the total annual NOx mass emissions from other electric generating units obtained from CEMS, if applicable.

(5) The owner or operator of a Santa Catalina Island NZE electric generating unit ≤ 0.4 Megawatts shall maintain records onsite for a minimum of five years of all data used to calculate the annual NOx mass emissions pursuant to paragraph (e)(4) and make available to the Executive Officer upon request.

(6) The owner or operator of a Santa Catalina Island NZE electric generating unit ≤ 0.4 Megawatts shall install a non-resettable device to continuously record the Megawatt-Hours of each unit.

(e) (~~3~~7) Backup Units

Until July 1, 2026, the owner or operator of a backup unit is not subject to paragraph (e)(2), provided that the owner or operator, for each backup unit:

(A) Install, maintain, and operate a totalizing fuel meter or any device approved by the Executive Officer to be equivalent in accuracy, reliability, reproducibility, and timeliness, to measure quarterly fuel usage;

(B) Conduct annual source testing to demonstrate compliance with the NOx emission limits as specified on the Permit to Operate according to South Coast AQMD Method 100.1 – Instrumental Analyzer Procedures for Continuous Gaseous Emission Sampling, South Coast AQMD Method 7.1 – Determination of Nitrogen Oxide Emissions from Stationary Sources, U.S. EPA Method 20 – Nitrogen Oxides from Stationary Gas Turbines; or U.S. EPA Method 7E – Nitrogen Oxide - Instrumental Analyzer;

(C) Conduct the initial source test pursuant to subparagraph (e)(~~3~~7)(B) within six months from the time the facility becomes a former RECLAIM NOx facility or within one year from the date of the last source test, whichever is later;

(D) Submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the source test(s) required in subparagraphs (e)(~~3~~7)(B) and (e)(~~3~~7)(C). The source test protocol shall include the following:

(i) Brief descriptions of the unit to be tested and process;

(ii) Operating conditions under which the test(s) will be conducted;

(iii) Planned sampling parameters, including a process schematic diagram showing the ports and sampling locations, with the dimensions of ducts and stacks at the sampling locations and distances of flow disturbances from the sampling locations;

(iv) Brief description of test, sampling, and analytical methods used to measure pollutant, temperature, flow rates, and moisture;

(v) Description of calibration and quality assurance procedures; and

(vi) Information on equipment, logistics, personnel, and other resources necessary to conduct an efficient and coordinated source test;

(E) In lieu of subparagraph (e)(~~3~~7)(D), a previously approved source test protocol may be used if:

(e) (~~3~~7) (E) (i) The unit has not been altered in a manner that requires a permit modification;

(ii) The permit emission factors or concentration limits or equipment-specific or category-specific emission rates have not changed since the previous test;

(iii) The approved source test protocol is representative of the operation and configuration of the unit;

(iv) The approved source test protocol meets the requirements in clauses (e)(~~3~~7)(D)(i) through (e)(~~3~~7)(D)(vi); and

(v) The approved source test protocol references the test method(s) required in subparagraph (e)(~~3~~7)(B);

(F) Submit a report of quarterly NOx mass emissions to the Executive Officer, using a format approved by the South Coast AQMD, as calculated using the emission factor specified in the Permit to Operate within 30 days after the end of the first three quarters and 60 days after the end of the fourth quarter of a compliance year;

(G) Tune-up once a year to manufacturer's specifications;

(H) Maintain the following records on-site for five years and make this information available to the South Coast AQMD upon request:

(i) Data collected and calibration records from the totalizing fuel meter or the Executive Officer-approved device as required by subparagraph (e)(~~3~~7)(A);

(ii) Source test protocols and reports as required by subparagraphs (e)(~~3~~7)(B) and (e)(~~3~~7)(D) or (e)(~~3~~7)(E);

(iii) Quarterly NOx mass emission reports as required by subparagraph (e)(~~3~~7)(F), including data used to calculate the NOx mass emissions; and

(iv) Record of each tune-up as required by subparagraph (e)(~~3~~7)(G); and

(I) Within six months of becoming a former RECLAIM NOx facility, submit a permit application that limits total annual operation time to no more than 1,300 hours per calendar year.

(~~4~~8) City of Glendale

The City of Glendale or any of its successors shall demonstrate compliance with paragraph (d)(~~6~~7) and calculate NOx emission rate in pounds of NOx per net Megawatt-Hour or NOx emission cap in pounds of NOx per day and tons of NOx per calendar year as established in their approved ~~Continuous Emission Monitoring System (CEMS)~~ CEMS Plan.

(e) (~~5~~9) Diesel Internal Combustion Engines

The owner or operator of each diesel internal combustion engine electric generating unit shall comply with the following provisions:

(A) Demonstrate compliance with the carbon monoxide and volatile organic compound ~~emissions~~emission limits of this rule pursuant to South Coast AQMD Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines subdivisions (f) – Monitoring, Testing, Recordkeeping and Reporting and (g) – Test Methods;

(B) Conduct yearly source test for particulate matter emissions according to South Coast AQMD Method 5.1 – Determination of Particulate Matter Emissions from Stationary Sources Using a Wet Impingement Train or South Coast AQMD Method 5.2 – Determination of Particulate Matter Emissions from Stationary Sources Using Heated Probe and Filter to demonstrate compliance with the particulate matter emission limit. The yearly emission limit shall be defined as a period of 12 consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month;

(C) Submit a source test protocol to the Executive Officer for written approval at least 60 days before the scheduled date of the source test(s) required in subparagraph (e)(~~5~~9)(B). The source test protocol shall include the information specified in clauses (e)(~~3~~7)(D)(i) through (e)(~~3~~7)(D)(vi); and

(D) In lieu of subparagraph (e)(~~5~~9)(C), a previously approved source test protocol may be used if the approved source test protocol meets all the criteria specified in clauses (e)(~~3~~7)(E)(i) through (e)(~~3~~7)(E)(v).

(~~6~~10) Catalytic and Non-Catalytic Control Devices with Ammonia Injection

(A) The owner or operator of each electric generating unit with a catalytic or non-catalytic control device with ammonia injection shall conduct quarterly source tests to demonstrate compliance with the ammonia emission limit specified in the Permit to Operate according to South Coast AQMD Method 207.1 – Determination of Ammonia Emissions from Stationary Sources during the first 12 months of operation of the electric generating unit with a catalytic or non-catalytic control device with ammonia injection and annually thereafter when four consecutive quarterly source tests demonstrate compliance with the ammonia emission limit specified in the Permit to Operate. If an annual test is failed, the owner or operator shall conduct four

consecutive quarterly source tests to demonstrate compliance with the ammonia emission limit specified in the Permit to Operate prior to resuming annual source tests.

(e) (~~6~~1 0) (B) In lieu of complying with subparagraph (e)(~~6~~10)(A), the owner or operator of an electric generating unit with a catalytic or non-catalytic control device with ammonia injection may utilize ammonia CEMS certified under an approved South Coast AQMD protocol to demonstrate compliance with the ammonia emission limit specified in the Permit to Operate.

(~~7~~1 1) The owner or operator of each former RECLAIM NOx facility and non-RECLAIM NOx facility shall maintain information pursuant to this subdivision at the facility for a period of five years, except that all data gathered or computed for intervals of less than 15 minutes shall be maintained for a minimum of 48 hours, and made available to South Coast AQMD upon request.

(~~8~~1 2) Operations Recordkeeping

The owner or operator of each former RECLAIM NOx facility and non-RECLAIM NOx facility shall maintain records, on a daily basis, for the following parameter(s) or item(s):

(A) Time and duration of startups and shutdowns;

(B) Total hours of operation;

(C) Quantity of fuel consumption;

(D) Cumulative hours of operation to date for the calendar year;

(E) Megawatt-hours of electricity produced; and

(F) Net ~~megawatt-hours~~Megawatt-hours electricity produced.

(f) Use of Liquid Petroleum Fuel

(1) Force Majeure Natural Gas Curtailment

The owner or operator of an electric generating unit shall not be subject to the NOx ~~emissions~~emission limits specified in subdivision (d) during force majeure natural gas curtailment when the use of liquid petroleum fuel is required and the electric generating unit may burn liquid petroleum fuel, provided that:

(f) (1) (A) Within 15 days of each occurrence, the owner or operator of each electricity generating facility submits an affidavit signed by a

corporate officer affirming that liquid petroleum fuel was burned due to force majeure natural gas curtailment; and

(B) Each electric generating unit, when it burns liquid petroleum fuel, emits NOx at no more than the applicable unit-specific liquid petroleum fuel NOx emission limit specified in the Permit to Operate.

(2) Distillate Fuel Oil Readiness Testing

The owner or operator of an electric generating unit shall not be subject to the NOx ~~emissions~~emission limits specified in subdivision (d) during distillate fuel oil readiness testing and the electric generating unit may burn liquid petroleum fuel, provided that:

(A) Distillate fuel oil readiness testing does not exceed 60 minutes per week;

(B) Each electric generating unit, when it burns liquid petroleum fuel, emits NOx at no more than the applicable unit-specific liquid petroleum fuel NOx emission limit specified in the Permit to Operate;

(C) The owner or operator conducts distillate fuel oil readiness testing only after the equipment has reached the emission limits specified in paragraph (d)(1) while firing on natural gas and no later than 60 minutes after achieving emission limits specified in paragraph (d)(1) while firing on natural gas; and

(D) Each distillate fuel oil readiness test commences with the equipment switching from natural gas to liquid petroleum fuel and concludes with the equipment switching from liquid petroleum fuel to natural gas.

(3) Source Testing and Fuel Flow Meter Calibration

The owner or operator of an electric generating unit shall not be subject to the NOx emission limits specified in subdivision (d) when it burns liquid petroleum fuel during emissions source testing or annual fuel flow meter calibration, and the electric generating unit may burn liquid petroleum fuel for emissions source testing or annual fuel flow meter calibration as specified by South Coast AQMD rules or the Permit to Operate, including initial certifications of CEMS and semi-annual Relative Accuracy Test Audits (RATAs). The owner or operator shall only conduct RATA tests and annual fuel flow calibration concurrently with distillate fuel oil readiness testing or during force majeure natural gas curtailment when the use of liquid petroleum fuel is required.

(g) Exemptions

(1) Combined Cycle Gas Turbines

The owner or operator of a combined cycle gas turbine installed prior to November 2, 2018 shall not be subject to paragraph (d)(1) for that combined cycle gas turbine, provided that:

(A) The Permit to Operate as of November 2, 2018 includes a condition limiting the NOx concentration to 2.5 ppmv NOx or less averaged over 60 minutes at 15 percent oxygen on a dry basis; and

(B) The NOx and ammonia limits, averaging times, and startup, shutdown, and, if applicable, tuning requirements specified on the Permit to Operate as of November 2, 2018 are retained.

(2) 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) shall not be subject to paragraph (d)(1) for that electric generating unit, provided that:

(A) The owner or operator retires the electric generating 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;

(B) The NOx and ammonia limits, averaging times, and startup, shutdown, and, if applicable, tuning requirements specified on the Permit to Operate as of November 2, 2018 are retained;

(C) On or before January 1, 2023, the owner or operator notifies South Coast AQMD of the compliance dates set forth in Table 1 of Section 2(B) of the Once-Through-Cooling Policy; and

(D) Within 3 months of approval of an extension of the compliance date set forth in Table 1 of Section 2(B) of the Once-Through-Cooling Policy, the owner or operator notifies South Coast AQMD of the extension. This extension is not applicable to facilities that have utilized the Modeling and Offset Exemptions in Rule 1304 – Exemptions paragraph (a)(2) and the associated replacement electric generating unit is in operation.

(g) (3) Diesel Internal Combustion Engines

The owner or operator of a diesel internal combustion engine installed prior to November 2, 2018 shall not be subject to paragraph (d)(~~3~~4) for that diesel internal combustion engine provided that:

(A) The Permit to Operate as of November 2, 2018 includes a condition limiting the NOx concentration to 51 ppmv NOx or less averaged over 60 minutes at 15 percent oxygen on a dry basis; and

(B) The NOx, ammonia, carbon monoxide, volatile organic compounds, and particulate matter limits, averaging times, and startup and shutdown requirements specified on the Permit to Operate as of November 2, 2018 are retained.

(4) Low-Use

(A) Gas Turbines

The owner or operator of a gas turbine installed prior to November 2, 2018 shall not be subject to ~~emissions~~emission limits specified under paragraph (d)(1) for that gas turbine, provided that the gas turbine:

(i) Maintains an annual capacity factor of less than twenty-five percent each calendar year;

(ii) Maintains an annual capacity factor of less than ten percent averaged over three consecutive calendar years on a rolling basis; and

(iii) Retains the NOx and ammonia limits, averaging times, and startup, shutdown, and, if applicable, tuning requirements specified on the Permit to Operate as of November 2, 2018.

(B) Boilers

The owner or operator of a boiler installed prior to November 2, 2018 shall not be subject to paragraph (d)(1) for that boiler, provided that the boiler:

(i) Maintains an annual capacity factor of less than two-and-one-half percent each calendar year;

(ii) Maintains an annual capacity factor of less than one percent averaged over three consecutive calendar years on a rolling basis; and

(g) (4) (B) (iii) Retains the NOx and ammonia limits, averaging times, and startup and shutdown requirements specified on the Permit to Operate as of November 2, 2018.

(C) Initial Requirement for Low-Use Exemption

The owner or operator of an electricity generating facility that elects the low-use exemption pursuant to subparagraph (g)(4)(A) or (g)(4)(B) for a gas turbine or boiler shall submit permit applications by July 1, 2022 for each electric generating unit requesting the change of permit conditions to incorporate the low-use exemption.

(D) Eligibility for Low-Use Exemption

Eligibility of the low-use exemption shall be determined annually for each electric generating unit and reported to the Executive Officer no later than March 1 following each reporting year.

(E) Exceedance of Low-Use Exemption

(i) If an electric generating unit with a low-use exemption pursuant to subparagraph (g)(4)(A) or (g)(4)(B) exceeds the annual or three year average annual capacity factor limit, such exceedance shall be a violation of this rule and the owner or operator of that electric generating unit is subject to issuance of a notice of violation each year there is an exceedance for each annual and/or three-year exceedance.

(ii) If an electric generating unit with a low-use exemption pursuant to subparagraph (g)(4)(A) or (g)(4)(B) exceeds the annual or three-year average annual capacity factor limit, the owner or operator of that electric generating unit shall:

(~~A~~I) Within six months of the date of reported exceedance of subparagraph (g)(4)(A) or (g)(4)(B), submit complete permit applications to repower, retrofit, or retire that electric generating unit;

(~~B~~II) Submit a CEMS Plan within six months from the date of complete permit application submittal pursuant to subclause (g)(4)(E)(ii)(A); and

(~~C~~III) Not operate that electric generating unit in a manner that exceeds the ~~emissions~~emission limits listed in Table I after two years from the date of the reported exceedance of subparagraph (g)(4)(A) or (g)(4)(B).

(g) (5) Internal combustion engines located on Santa Catalina Island are exempt from subdivision (f).