



Proposed Amended Rule 1135

Emissions of Oxides of Nitrogen from Electric Power Generating Systems

Working Group Meeting #5

September 25, 2018

Agenda

- ▶ Summary of Public Workshop
- ▶ Discuss Revised Draft Rule Language

Public Workshop – August 2, 2018

- ▶ Presented
 - ▶ Regulatory Background
 - ▶ Preliminary Draft Rule Language
 - ▶ Cost-Effectiveness and Emission Reductions
 - ▶ California Environmental Quality Act (CEQA)
 - ▶ Socioeconomic Impact Assessment
- ▶ Received
 - ▶ 12 comment letters

Revised Draft Rule Language

Overview

- ▶ Revised draft rule language incorporates comments from Public Workshop
- ▶ Presentation will highlight new and revised key provisions
- ▶ Requesting further input from stakeholders where issues remain

Applicability (subdivision (b))

- ▶ Applies to electric generating units at:
 - ▶ Investor-owned electric utilities
 - ▶ Publicly owned electric utilities
 - ▶ Facilities with a combined generation capacity of ≥ 50 megawatts
- ▶ Excludes petroleum refineries (NAICS Code: 324110)
- ▶ Previous definition included facilities that sold power to the California Independent System Operator Corporation which was too broad and included facilities that were not power plants
- ▶ Revised definition results in the loss of 2 facilities and 8 electric generating units; no new facilities or units

Revised Definitions (subdivision (c))

- ▶ Annual Capacity Factor
- ▶ Electric Generating Unit
- ▶ Electricity Generating Facility
- ▶ Internal Combustion Engine
- ▶ RECLAIM NO_x Source
- ▶ SCAQMD-Wide Daily Limits
- ▶ Start-Up
- ▶ Tuning

New Definitions (subdivision (c))

- ▶ Former RECLAIM NOx Source
 - ▶ An electric generating unit located at an electricity generating facility that was in RECLAIM as of January 5, 2018, and has received a final determination notification, and is no longer in the RECLAIM program
- ▶ Investor-Owned Electric Utility
 - ▶ 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

New Definitions (subdivision (c)) *(continued)*

▶ Non-RECLAIM NOx Source

- ▶ An electric generating unit located at an electricity generating facility that is not and never was in RECLAIM

▶ Publicly Owned Electric Utility

- ▶ Special-purpose district or other jurisdiction, including municipal districts, that operates electric generating unit(s) for electric power distribution to residents of that district or jurisdiction

Removed Definitions (subdivision (c))

- ▶ Landfill
- ▶ Municipal or Public Utility
- ▶ Petroleum Refinery
- ▶ Publicly Owned Treatment Works

Emission Limits - Table 1 and Table 2

- ▶ Limits remain the same but significant digits revised
- ▶ Minor formatting changes

Alternative Compliance Approach for Electric Generating Units on Santa Catalina Island (paragraph (d)(5))

- ▶ Due to Santa Catalina Island having no access to natural gas, diesel internal combustion engines are the primary option for electricity generation
 - ▶ PAR 1135 includes an option for an alternative compliance approach to incentivize lower emitting electricity generation technologies
- ▶ Revised provisions includes only one alternative compliance option with notification of decision to elect alternative compliance approach due by 1/1/22
 - ▶ Mass emission limit of 13 tons of NO_x annually by 1/1/26
 - ▶ Must include a permit condition limiting annual NO_x emissions

Time Extensions (paragraph (d)(6))

- ▶ Added provisions for time extensions for Santa Catalina Island in order to further incentivize lower emitting electricity generating facilities
- ▶ Santa Catalina Island may submit a request for up to three years extension with a mitigation fee of \$100,000/year
 - ▶ If retrofitting or repowering engines, must have at least two engines meet PAR 1135 limits by 1/1/23
 - ▶ If electing alternative compliance approach, must meet actual mass emissions limit of 50 tons NO_x annually by 1/1/2023 and 40 tons of NO_x annually by 1/1/24

City of Glendale (paragraph (d)(7))

- ▶ City of Glendale is currently the only Rule 1135 facility
 - ▶ Intention was to retain existing requirements for SCAQMD-wide daily limits boilers during interim
 - ▶ Previous provisions subjected all electric generating units at City of Glendale to the SCAQMD-wide limits and annual limits
- ▶ Current provisions revised to subject only the boilers at City of Glendale to the SCAQMD-wide limits and annual limits

Change of Permit Conditions (paragraph (d)(8))

- ▶ As facilities transition out of RECLAIM to landing rules, their permits will need to be revised to remove references to RECLAIM rules and include references to landing rules
- ▶ Added a provision which requires electricity generating facilities to submit applications for change of permit conditions to reconcile their permits with Rule 1135 by July 1, 2022

Monitoring, Recordkeeping, and Reporting (MRR) (subdivision (e))

- ▶ SCAQMD is currently working on adopting Rule 113 – Monitoring, Reporting, and Recordkeeping (MRR) Requirements for NO_x and SO_x Sources
 - ▶ Once Rule 113 is adopted, all Rule 1135 facilities will transition to Rule 113 for MRR
 - ▶ In the interim, the intention of the PAR 1135 MRR is to maintain current MRR for all facilities

MRR – General Requirements (paragraphs (e)(1) and (e)(7))

- ▶ Maintain records for 5 years and make available to SCAQMD upon request
- ▶ Maintain an operating log for each electric generating unit
 - ▶ Time and duration of start-ups and shutdowns
 - ▶ Total hours of operation
 - ▶ Quantity of fuel
 - ▶ Cumulative hours of operation to date for the calendar year
 - ▶ Megawatt hours and net megawatt hours produced

MRR – RECLAIM NO_x Sources and Former RECLAIM NO_x Sources (paragraph (e)(2))

- ▶ Comply with Rule 2012 – Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_x) excluding reporting provisions

MRR – Non-RECLAIM NO_x Sources (paragraph (e)(3))

- ▶ Two MRR Options
 - ▶ Rule 218 – Continuous Emission Monitoring; or
 - ▶ 40 CFR Part 75 and calculate NO_x concentration in accordance with SCAQMD Rule 218

MRR – City of Glendale (paragraph (e)(4))

- ▶ Removed all current Rule 1135 monitoring provisions, including CEMS Requirements Document for Utility Boilers
- ▶ Comply with MRR provisions for Non-RECLAIM NOx Sources
 - ▶ Rule 218 or 40 CFR Part 75
- ▶ Calculate NOx emissions rates in lbs/MWH or lbs/day and tons/year in accordance with approved CEMS Plan

MRR – Internal Combustion Engines (paragraph (e)(5))

- ▶ For NO_x, comply with MRR provisions for RECLAIM NO_x Source or former RECLAIM NO_x source
 - ▶ Rule 2012 excluding provisions
- ▶ For CO and VOC, comply with SCAQMD Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines
 - ▶ Subdivisions (f) – Monitoring, Testing, Recordkeeping and Reporting and (g) – Test Methods
- ▶ For PM, yearly source test
 - ▶ SCAQMD Method 5.1 – Determination of Particulate Matter Emissions from Stationary Sources Using a Wet Impingement Train
 - ▶ SCAQMD Method 5.2 – Determination of Particulate Matter Emissions from Stationary Sources using Heated Probe and Filter

Ammonia Emissions Limits (paragraph (e)(6))

- ▶ Source test using SCAQMD Method 207.1 – Determination of Ammonia Emissions from Stationary Sources
 - ▶ Quarterly during the first year equipment installed
 - ▶ Annually thereafter if quarterly testing passes
- ▶ Instead of source testing, may install ammonia CEMS with an approved protocol

Exemptions – Boilers (paragraph (g)(2))

- ▶ Previous provision allowed for boilers at 7 ppmv NO_x or less to be exempt from PAR 1135 NO_x and ammonia limits
- ▶ Removing provision because the boilers at 7 ppmv NO_x have submitted applications to be shutdown and no other boilers would be applicable to these provisions

Exemptions – Once-Through-Cooling Electric Generating Units (paragraph (g)(2))

- ▶ Previous provisions only allowed an exemption for once-through-cooling (OTC) boilers
 - ▶ Most of the OTC shutdowns are boilers, but there are two Rule 1135 turbines that are subject to the OTC regulation
 - ▶ Revised provisions to include all OTC electric generating units
- ▶ Previous provisions required electric generating units to be shutdown by the date mandated by the Clean Water Act as of the rule adoption date
 - ▶ California Air Resources Board, California Energy Commission, and California Independent System Operator were concerned that not allowing for extensions may disrupt the state electrical grid
 - ▶ Revised provisions to allow for these extensions, but within 3 months of extension approval, must notify SCAQMD

Exemptions – Initial Requirement for Low-Use Exemption (subparagraph (g)(4)(C))

- ▶ Previous provision required a demonstration of compliance using data from 2016 – 2018 to qualify for low-use exemption
 - ▶ Stakeholders commented that provision restricts facilities when flexibility is needed to retrofit units to meet BARCT limits
 - ▶ Current rule language removes requirement to demonstrate compliance
- ▶ Previous provision required submittal permit application by January 1, 2019
 - ▶ Stakeholders commented that facilities needed more time to make decision to utilize low-use exemption
 - ▶ Current rule language revised submittal date to July 1, 2022, the latest date which still allows engineering to process permits by January 1, 2024

Exemptions – Eligibility and Exceedance of Low-Use Exemption (subparagraphs (g)(4)(D) and (g)(4)(E))

- ▶ Provisions of low-use exemption exceedance tightened to reduce excess emissions
 - ▶ Eligibility determinate and reporting date changed from July 1 to March 1
 - ▶ Application to address exceedance required within six months from date of reported exceedance
 - ▶ Compliance with BARCT emission limits reduced to two years from reported exceedance date
 - ▶ Facility will be issued a one-time notice of violation for exceedance

Tentative Schedule

October 5, 2018	Set Hearing
November 2, 2018	Public Hearing

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