Proposed Amended Rule 1135
Emissions of Oxides of Nitrogen from Electricity Generating Facilities

and

Proposed Rule 429.2
Startup and Shutdown Exemption Provisions for Oxides of Nitrogen from Electricity Generating Facilities

Public Workshop
October 27, 2021
Agenda

- Background
- Proposed Amended Rule 1135 (PAR 1135)
- Proposed Rule 429.2 (PR 429.2)
- PAR 1135 and PR 429.2 Impact Assessment
- Next Steps
Background
Rule 1135 – Background and Applicability

- **Adopted in 1989**
  - Establishes NOx limits for electric power generating steam boiler systems, repowered units, and alternative electricity generating sources

- **Last amended on November 2, 2018**
  - Expanded applicability to all combustion equipment at RECLAIM, non-RECLAIM, and former RECLAIM electricity generating facilities (EGFs)
  - Implemented Best Available Retrofit Control Technology (BARCT) for NOx emissions from boilers, gas turbines, and diesel internal combustion engines

- **Applies to electric generating units at EGFs**
  - Includes boilers, gas turbines, and Santa Catalina Island diesel internal combustion engines
  - Excludes units located at landfills, petroleum refineries, and publicly owned treatment works
Objective of Proposed Amendments

- **Proposed Amended Rule 1135**
  - Consistency with policy changes that have been implemented after 2018 Rule 1135 amendment
    - Address ammonia slip limits for selective catalytic reduction (SCR) and selective non-catalytic reduction (SNCR) systems during permitting instead of in command-and-control rule
    - Include startup and shutdown requirements in command-and-control rules per U.S. EPA recommendation
    - Align CEMS requirements with recently amended and adopted Rule 218-series rules for former RECLAIM and non-RECLAIM facilities
  - Address stakeholder requests for other updates to Rule 1135

- **Proposed Rule 429.2**
  - Companion rule to Rule 1135
  - Needed to provide exemptions from NOx limits and additional requirements during startup and shutdown events to align with U.S. EPA policies
Overview of PAR 1135 and PR 429.2 Amendments

PAR 1135

- Remove ammonia limits for SCR and SNCR systems
- Move startup and shutdown provisions to PR 429.2
- Reference Rules 218.2 and 218.3 for CEMS requirements
- Revise NOx averaging time for diesel internal combustion engines
- Provide additional clarifications

PR 429.2

- Exempt units from Rule 1135 concentration limits during startup and shutdown
- Establish startup and shutdown duration and frequency provisions
- Include best management practices and recordkeeping requirements
Proposed Amended Rule 1135
## Definitions Subdivision (c)

### Adding
- Backup Unit
- Fuel-Weighted Average

### Modifying
- Emissions Cap
- Emissions Rate

### Updating
- Electricity Generating Facility
- Former RECLAIM NOx Source
- Non-RECLAIM NOx Source
- RECLAIM NOx Source
- Shutdown
- Startup

### Removing
- Landfill
- Petroleum Refinery
- Publicly Owned Treatment Works
- SCAQMD-Wide Daily Limits
Backup Unit
Paragraph (c)(2)

- PAR 1135 allows RECLAIM NOx process units to continue operating without CEMS until July 1, 2026
- “NOx Process Unit” is a RECLAIM term, PAR 1135 term is “Backup Unit"
  - Definition is based on RECLAIM definitions for “NOx Process Unit” and “Peaking Unit”

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 CFR Part 72, and was a NOx process unit prior to the facility becoming a former RECLAIM NOx facility.
Fuel-Weighted Average
Paragraph (c)(12)

• PAR 1135 revises averaging time for diesel internal combustion engines on Santa Catalina Island
• New definition is needed as revised NOx emission limits will be calculated as a fuel-weighted average

FUEL-WEIGHTED AVERAGE is calculated as the sum of the hourly fuel usage multiplied by the hourly average NOx concentration in ppmv divided by the total fuel usage, expressed in ppmv.

\[
\text{Fuel-Weighted Average} = \frac{\sum \text{NOx Concentration (ppmv)} \times \text{Fuel Use (gallons)}}{\text{Total Fuel Use (gallons)}}
\]
• Revise Shutdown and Startup to reference Proposed Rule 429.2

**SHUTDOWN**—means the time period during which an electric generating unit begins reducing load and ending in a period of zero fuel flow or as otherwise defined in the SCAQMD permit is as defined in South Coast AQMD Rule 429.2 – Startup and Shutdown Exemption Provisions for Oxides of Nitrogen from Electricity Generating Facilities.

**START-UP**—means the time period that begins when an electric generating unit begins combusting fuel after a period of zero fuel flow and ends when the electric generating unit generates electricity for sale over the grid for power distribution, or as otherwise defined in the SCAQMD permit is as defined in South Coast AQMD Rule 429.2.
Removal of Ammonia Limits
Subdivision (d) – Tables 1 and 2

- Remove provisions related to ammonia emission limits in subdivision (d), including in Tables 1 and 2
- Ammonia limits will be addressed during permitting

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**Table 1: Emissions Limits for Boilers and Gas Turbines**

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>NOₓ (ppmv)¹</th>
<th>Ammonia (ppmv)</th>
<th>Oxygen Correction (% dry)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Combined Cycle Gas Turbine and Associated Duct Burner</td>
<td>2</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Simple Cycle Gas Turbine</td>
<td>2.5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

¹ - The NOₓ emission limits in Table 1 shall not apply during start-up, shutdown, pursuant to Rule 429.2, and tuning.

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**Table 2: Emissions Limits for Diesel Internal Combustion Engines**

<table>
<thead>
<tr>
<th></th>
<th>NOₓ (ppmv)¹,²</th>
<th>Ammonia (ppmv)³</th>
<th>Carbon Monoxide (ppmv)²,⁴</th>
<th>Volatile Organic Compounds (ppmv)³,⁴</th>
<th>Particulate Matter (lbs/mmbtu)⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>5</td>
<td>250</td>
<td>30</td>
<td>0.0076</td>
<td></td>
</tr>
</tbody>
</table>

¹ - Corrected to 15% oxygen on a dry basis and fuel-weighted averaged over a 60-minute three-hour rolling average
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 - The NOₓ, carbon monoxide, and volatile organic compounds emissions limits in Table 2 shall not apply during start-up, startup, and shutdown, pursuant to Rule 429.2.
⁵ - Applies to both filterable and condensable particulate matter
Current Rule 1135 requires diesel engines meet NOx concentration limit of 45 ppmv (at 15% O₂) by January 1, 2024 with an option of a 3-year extension.

- NOx limit derived from U.S. EPA Tier 4 Final emission standard (0.67 g/kWh or 0.50 g/bhp-hr for a generator set) with an assumed engine efficiency at 40%.
- Tier 4 Final certification tests measure NOx concentrations at different operating loads and averages the results.

Based on discussions with Southern California Edison (SCE), all six diesel internal combustion engines on Santa Catalina Island will be replaced with U.S. EPA Tier 4 Final-certified diesel engines to meet Rule 1135 emission limits.

- Replacement of all six engines expected to be completed before January 1, 2027.
Revised Emissions Limits for Diesel Internal Combustion Engines
Paragraph (d)(2)

• Maintain NOx concentration of 45 ppmv
• Change 60-minute rolling average to a fuel-weighted average over a 3-hour rolling average
  • Longer averaging period to address potential fluctuations and to avoid having to shutdown and restart the engine which would be more emissive
  • Fuel-weighted average allows for NOx ppmv calculation to account for fuel usage over a certain NOx concentration
• Clarifying that the emission limit for particulate matter includes both filterable and condensable particulate matter, consistent with 40 CFR Part 1065

Table 2: Emissions Limits for Diesel Internal Combustion Engines

<table>
<thead>
<tr>
<th>NOx (ppmv)</th>
<th>Ammonia (ppmv)</th>
<th>Carbon Monoxide (ppmv)</th>
<th>Volatile Organic Compounds (ppmv)</th>
<th>Particulate Matter (lbs/mmbtu)</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>5</td>
<td>250</td>
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<td>0.0076</td>
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</tbody>
</table>

1 – Corrected to 15% oxygen on a dry basis and fuel-weighted averaged over a 60-minute three-hour rolling average
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 – The NOx, carbon monoxide, and volatile organic compounds emissions limits in Table 2 shall not apply during start-up and shutdown, pursuant to Rule 429.2.
5 – Applies to both filterable and condensable particulate matter
Removal of Provisions

Startup, Shutdown, and Tuning Requirements (Former Paragraph (d)(3))

Alternative Compliance Approach for Santa Catalina Island Engines (Former Paragraph (d)(4))

**Former Paragraph (d)(3)**
- Remove startup, shutdown, and tuning requirements from Rule 1135
- Address startup and shutdown requirements in PR 429.2

**Former Paragraph (d)(4)**
- SCE has informed staff of plan to replace Santa Catalina Island engines to meet Table 2 emission limits and not pursue alternative compliance approach
- Removing provision and all references to alternative compliance approach for Santa Catalina Island engines
Current Rule 1135 requires a minimum of two Santa Catalina Island units meet the Table 2 emissions limits by January 1, 2023 to receive a three-year extension.

Based on discussions with SCE, first two replacement engines are likely to be installed after January 1, 2023.

Revising time extension criteria to require that facility limit annual NOx emissions to 55 tons starting compliance year 2023 until Table 2 emissions limits are achieved:
- Reduction in annual NOx emissions is the same amount as if two engines were replaced.

Adding an additional one-time 12-month extension after the initial three-year extension if delay occurs due to unforeseen circumstances:
- Facility must limit their emissions to 35 tons of NOx for compliance year 2027.
- Emissions limit is the same amount as if all engines, except for engines near the 45 ppmv limit, were replaced.
In March 2021, Rule 218-series rules were amended and adopted to align CEMS requirements for RECLAIM and non-RECLAIM facilities.

- As facilities exit RECLAIM, facilities will be transitioned from Rule 2012 to Rules 218.2 and 218.
- Non-RECLAIM facilities will be transitioned from Rules 218 and 218.1 to Rules 218.2 and 218.3.
- Transition to Rules 218.2 and 218.3 are based on the schedule provided in Rule 218.2.
Monitoring for Backup Units
Paragraph (e)(3)

- RECLAIM NOx peaking units are considered NOx process units and are not required to install CEMS per Rule 2012
  - Termed as “Backup Units” in PAR 1135
  - Only two units in South Coast AQMD are “Backup Units”

- To allow sufficient time for RECLAIM facilities with Backup Units to install CEMS, PAR 1135 will allow annual source testing and require other provisions until July 1, 2026
  - Within 6 months of becoming a former RECLAIM NOx facility, facility must submit permit applications to limit operating hours to 1,300 hr/year

Monitoring Requirements for Backup Units (paragraphs (e)(3)(A) through (e)(3)(H))

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
</table>
| Measure quarterly fuel usage using a totalizing fuel meter or equivalent approved device | Conduct annual source testing
  - Initial source test conducted within 6 months of becoming a former RECLAIM NOx facility, or within one year of last source test, whichever is later |
| Submit source test protocol at least 60 days before source test or use a previously approved source test protocol | Start quarterly NOx mass emissions reports |
| Tune-up unit once a year to manufacturer’s specifications                  | Maintain records on-site for 5 years of: fuel usage, source test, NOx emission, and tune-up |
Source Testing for Diesel Internal Combustion Engines
Ammonia Emissions Testing or Monitoring

Subparagraphs (e)(5)(C) and (e)(5)(D)

- For consistency with paragraph (e)(3) - Backup Units, add source test protocol submittal requirements for diesel internal combustion engines

Paragraph (e)(6)

- Current Rule 1135 only refers to ammonia testing or monitoring for catalytic control devices
- Add non-catalytic control devices with ammonia injection to ensure source testing or continuous monitoring of ammonia emissions requirements apply to all electric generating units that emit ammonia
• Current exemption for Once-Through Cooling (OTC) units assumed all units would be retired
• Staff has been informed that some OTC units may no longer retired and instead have OTC systems removed
• Clarify that exemption from Table 1 emission limits only applies to OTC units to be retired
• Add sunset date of December 31, 2029 to limit how long OTC units can operate above the Table 1 emission limits

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.

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

(BC) 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 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; and

(CD) 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, and

(D) The owner or operator complies with the compliance date set forth in Table 1 of Section 2(B) of the Once-Through-Cooling Policy.
Proposed Rule 429.2

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

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

Subdivision (c)

## Definitions from Rule 1135
- Electric Generating Unit
- Electricity Generating Facility
- Oxides of Nitrogen (NOx) Emissions

## Definitions from Other Startup and Shutdown Rulemakings (Rule 429 and PR 429.1)*
- Minimum Operating Temperature
- NOx Post-Combustion Control Equipment
- Stable Conditions

## Definitions Specific to PR 429.2
- Boiler Cold Start
- Boiler Non-Cold Start
- Scheduled Startup
- Shutdown
- Startup

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* Rule 429 – Start-up and Shutdown Exemption Provisions for Oxides of Nitrogen
  PR 429.1 – Start-up and Shutdown Provisions at Petroleum Refineries and Related Operations
• Definitions required to explain necessary operating parameters of units with NOx post-combustion controls
• Will help with compliance determination

Paragraph (c)(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.

Paragraph (c)(6)

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

Paragraph (c)(10)

STABLE CONDITIONS means that the fuel flow to an electric generating unit is consistent and allows for normal operations.
Boiler Cold Start and Boiler Non-Cold Start Paragraphs (c)(1) and (c)(2)

- Proposing two startup duration limits for boiler cold start and non-cold start
  - Boiler startup durations differ based on length of time the unit has been shut down
- Definitions based on U.S. EPA definitions for cold, warm, and hot startups for boilers*
- Hot standby is when the igniters are on and fuel flow is minimal, but no electricity is being generated

## Startup and Shutdown Definitions

### Startup
- Beginning of startup is specified in definition and occurs at initial combustion of fuel
- Ending of startup will be imposed as when the startup duration limit is reached or when post combustion control device reaches stable conditions and minimum operating temperature

### Shutdown
- Begins when units start to reduce load and ends when unit is no longer combusting fuel
- For units with NOx post-combustion control, shutdown begins when exhaust temperatures fall below the minimum operating temperature
- If exhaust temperatures are still high, beginning of shutdown is the time limit counted back from point of zero fuel flow
Scheduled Startup
Paragraph (c)(8)

- Paragraph (d)(5) limits the frequency of scheduled startup events
- Only frequency of scheduled startups are regulated
  - Startups to meet energy demand, equipment failures, unplanned maintenance are not considered a scheduled startup
- Definition modified from Rule 429

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.
Paragraph (d)(1)

- Units are exempt from Rule 1135 NOx emission limit provisions during startup and shutdown.
- Provisions for duration of startup and shutdowns are referring to the time that an owner or operator is exempt from the Rule 1135 NOx concentration limit during a startup or shutdown event.
- Exemption necessary as add-on air pollution control equipment cannot be utilized until the electric generating unit is at specific conditions and is stable.

An owner or operator an electricity generating unit is not subject to the NOx emission limits and the applicable rolling average and oxygen correction provisions pursuant to Rule 1135 during startup and shutdown.
Approach for Establishing Startup and Shutdown Duration Limits

- Review all existing applicable equipment permits
- Obtain facility documentation of startup and shutdown events

Compile startup and shutdown duration limits

Establish startup and shutdown duration limits based on:
- Most inclusive value for units installed before rule adoption
- Most stringent value for units installed on or after rule adoption

Startup and Shutdown Duration Limits refers to maximum duration that unit is exempt from Rule 1135 NOx concentration limits during startup and shutdown.
Startup and Shutdown Duration Limits – Paragraphs (d)(2) and (d)(3)

- Effective January 1, 2024, units installed prior to rule adoption will be subject to Table 1.
- Units that have more stringent startup and shutdown limits in their permits will follow the permit conditions.
- Conditions for startups that are aborted due to an automatic equipment shutdown to prevent equipment damage or as a result of equipment malfunction, will be addressed in the permits.
- Units installed on or after rule adoption will be subject to Table 2.
- More stringent startup and shutdown duration limits than for existing equipment since these units will have newer technology with faster startup and shutdown times.

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

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Time Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Startup</td>
</tr>
<tr>
<td>Boiler</td>
<td>Boiler Cold Start: 24 hours</td>
</tr>
<tr>
<td></td>
<td>Boiler Non-Cold Start: 12 hours</td>
</tr>
<tr>
<td>Combined Cycle Gas Turbine and Associated Duct Burner</td>
<td>6 hours</td>
</tr>
<tr>
<td>Simple Cycle Gas Turbine</td>
<td>1 hour</td>
</tr>
<tr>
<td>Diesel Internal Combustion Engines</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Time Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Cycle Gas Turbine and Associated Duct Burner</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Simple Cycle Gas Turbine</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Diesel Internal Combustion Engines</td>
<td>30 minutes</td>
</tr>
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</table>
### Additional Limitations to Startups

#### Startup Duration – Paragraph (d)(4)

**Number of Scheduled Startups - Paragraph (d)(5)**

<table>
<thead>
<tr>
<th>Paragraph (d)(4)</th>
<th>Paragraph (d)(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Requires that startup times cannot last longer than the time necessary to:</td>
<td>• Effective January 1, 2024, the number of scheduled startups is limited to two events per year</td>
</tr>
<tr>
<td>• Reach stable conditions, and</td>
<td>• Unscheduled startups are not limited because they may be driven by operational demand dependent on energy grid requirements,</td>
</tr>
<tr>
<td>• Reach minimum operating temperature of the NOx post-combustion control</td>
<td>emergencies, or maintenance needs</td>
</tr>
<tr>
<td>• If a unit reaches stable conditions and the minimum operating temperature of the control equipment is reached before reaching the startup</td>
<td>• Scheduled startups will count toward the number of total startups</td>
</tr>
<tr>
<td>duration limit, the startup period is over, and the unit is required to meet applicable Rule 1135 emission limits</td>
<td>• A scheduled startup includes:</td>
</tr>
<tr>
<td>• Provision further limits exceedances of the Rule 1135 emission limits</td>
<td>• Catalyst changeout</td>
</tr>
<tr>
<td></td>
<td>• Planned maintenance</td>
</tr>
<tr>
<td></td>
<td>• Source testing</td>
</tr>
</tbody>
</table>
• Effective upon rule adoption, during startup and shutdown, all reasonable and prudent steps must be taken to minimize emissions
• Provision was modified from existing Rule 429 provision
• Ensures best management practices
• Includes maintenance, equipment repairs, and adjusting temperature of post-combustion controls
Requirements for Units with NOx Post-Combustion Control Equipment

**Paragraph (d)(7)**

- Required to have temperature measuring device that is calibrated annually at the inlet of the NOx post-combustion control equipment

**Paragraph (d)(8)**

- NOx post-combustion control equipment must be operated, including the injection of any associated chemical reagent, if the temperature of the gas to the inlet of the emission control system is greater than or equal to the minimum operating temperature
Recordkeeping Requirements
Subdivision (e)

- Record scheduled startups, including date, time, reason, and any changes
- Log of each startup and shutdown, including date, time, duration, and reason
- Maintain NOx CEMS data during startup and shutdown
- Documentation of manufacturer’s minimum operating temperature for units with NOx post-combustion control
- Records to be maintained on-site for 5 years and made available to the South Coast AQMD upon request
Exemptions
Subdivision (f)

• OTC units that will be retired by its OTC Policy deadline will be exempt from:
  • Startup and shutdown duration limits
  • Frequency of scheduled startups
  • Installation of a temperature measuring device
• These units are scheduled to retire in a few years and will not be cost-effective to alter the equipment
  • Also, older equipment may require additional scheduled startups to address maintenance issues
• Adding sunset December 31, 2029 to prevent indefinite extensions of the retirement date
PAR 1135 and PR 429.2
Impact Assessment
Costs, Emission Reductions, and Cost-Effectiveness and Incremental Cost-Effectiveness

**Costs**
- The provisions in PAR 1135 and PR 429.2 are not expected to impose any additional costs

**Emission Reductions**
- No additional emission reductions expected

**Cost-Effectiveness and Incremental Cost-Effectiveness**
- Cost-effectiveness and incremental cost-effectiveness analyses not applicable to PAR 1135 and PR 429.2 because no new BARCT requirements are included
Socioeconomic Assessment

• PAR 1135 and PR 429.2 do not impose additional costs to the affected facilities
• No adverse socioeconomic impacts
• PAR 1135 and PR 429.2 comprise the proposed project and are subject to CEQA
• South Coast AQMD is reviewing the proposed project to determine if it will result in any environmental impacts
• Appropriate CEQA documentation will be prepared
Next Steps

- Public Workshop Comments Due
  - November 10, 2021

- Individual Stakeholder Meetings
  - Ongoing as needed

- Stationary Source Committee Meeting
  - November 19, 2021

- Set Hearing
  - December 3, 2021

- Public Hearing
  - January 7, 2022
<table>
<thead>
<tr>
<th>Staff Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rule Development</strong></td>
</tr>
<tr>
<td>Charlene Nguyen</td>
</tr>
<tr>
<td>(909) 396-2648</td>
</tr>
<tr>
<td>Uyen-Uyen Vo</td>
</tr>
<tr>
<td>(909) 396-2238</td>
</tr>
<tr>
<td>Michael Morris</td>
</tr>
<tr>
<td>(909) 396-3282</td>
</tr>
<tr>
<td><strong>RECLAIM</strong></td>
</tr>
<tr>
<td>Isabelle Shine</td>
</tr>
<tr>
<td>(909) 396-3064</td>
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<tr>
<td>Rudy Chacon</td>
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<tr>
<td>(909) 396-2726</td>
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<tr>
<td><strong>General Questions</strong></td>
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<tr>
<td>Susan Nakamura</td>
</tr>
<tr>
<td>(909) 396-3105</td>
</tr>
<tr>
<td>For more information:</td>
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<tr>
<td>PAR 1135 and PR 429.2</td>
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<tr>
<td>Proposed Rules Web Page</td>
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