

November 15, 2021

Mr. Michael Morris
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Morris:

Subject: Los Angeles Department of Water and Power's (LADWP) Comments on 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

LADWP appreciates the opportunity to provide comments on the Proposed Amended Rule (PAR) 1135 – Emissions of Oxides of Nitrogen from Electricity Generating Facilities and Proposed Rule (PR) 429.2– Startup and Shutdown Exemption Provisions for Oxides of Nitrogen from Electricity Generating Facilities. LADWP remains committed to working with the South Coast Air Quality Management District (SCAQMD) during this rulemaking process and looks forward to refining the proposed language in ensuring a successful implementation of the proposed rules.

LADWP is the largest municipality in the nation. A vertical integrated utility, LADWP is unique in that it owns and operates its own generation, transmission, and distribution systems. For this reason, LADWP does not rely on the energy market or other transmission system operators as a primary means to meet its power needs. LADWP is required by its City Charter to provide reliable and affordable power to the City of Los Angeles. Grid reliability and being able to operate its generating stations at all times is a regulatory certainty that LADWP must be allowed in order to meet the City Charter mandate.

In this letter, LADWP will be providing comments on draft language that was presented during the PAR 1135 and PR 429.2 Working Group meeting held on October 27, 2021.

In response to SCAQMD's request for stakeholder input, LADWP respectfully submits the following comments on the draft rule language.

**Comments on Proposed Amended Rule 1135 –
Continuous Emission Monitoring Performance Specifications**

1. Section (d)(5) – Change of Permit Conditions

“On or before July 1, 2022, the owner or operator of an electricity generating facility shall submit an application for a change of permit conditions to reconcile their permit(s) with Rule 1135.”

Comment: LADWP seeks clarification on whether the permit changes required by Rule 1135 involve adding a blanket permit provision reflecting the applicability of Rule 1135 to the permit or if each individual unit permit condition must be updated or revised to reflect the new provisions under the rule. Rule 1135 is projected to be amended by January 7, 2022, and LADWP will have to apply for permit modifications to reconcile permits with this rule. To allow for sufficient time to consolidate all permit changes and comply with the regulation, LADWP suggests that the permit application due date be extended one year after the date of Rule 1135 amendment adoption. LADWP requests that the permit application due date be extended from July 1, 2022 to January 7, 2023.

LADWP also seeks confirmation that when the permit is revised, the new permit limits will be effective once the units exit RECLAIM and not upon adoption of the rule or when the revised permit is issued. LADWP would also like clarification on whether compliance with Rule 1135's specified concentration limits is expected by December 31, 2023 if the RECLAIM exit will potentially be delayed to 2024. LADWP requests that the facility permits provide clarity on the compliance obligations for RECLAIM regulations and Rule 1135 in the event that the approved RECLAIM exit is delayed past 2023.

2. Section (f)(2) – Fuel Oil Readiness Testing

Comment: LADWP uses diesel fuel as a backup fuel. LADWP requests SCAQMD to change all references to “fuel oil” to “distillate fuel oil” in this section to capture both diesel and fuel oils.

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

1. Section (c)(8) – Scheduled Startup Definition

“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.”

Comment 1: LADWP seeks clarification as to whether startups due to periodic source testing, diesel readiness testing, and other required regulatory testing are considered scheduled startups. If these events are considered scheduled startups, the proposed annual limit of two specified in Section (d)(5) is not sufficient to meet permit conditions and maintain electrical system reliability, given the frequency of startups due to these required tests. Table A below shows the annual total of source tests and allowed diesel readiness testing as required by the Title V Operating Permit (Permit):

Table A – Number of Periodic Testing Per Unit Type Per Year

Unit Type	Source Testing*	Diesel Readiness Testing	Annual Total
Boiler	3	0	3
Simple Cycle	4-10	12	16-22
Combined Cycle	7-12	52	59-64

*Required source tests include RATA (up to two a year), Ammonia Slip (up to 4 a year), CO, NO_x performance, PM (3 per year at full load, full load with ducts, minimum load), Triennial (PM_{2.5}, SO_x and VOC).

In addition, LADWP generating units are subject to periodic Western Electricity Coordinating Council (WECC) testing needed to ensure system reliability. LADWP is requesting SCAQMD to exclude source tests, diesel readiness testing, and system reliability testing from the “Scheduled Startup” definition or increase the number of allowed scheduled startups in Section (d)(5) to accommodate scheduled testing listed in the table above.

Comment 2: SCAQMD’s proposed requirement for facilities to specify outage (or scheduled startup) dates at the beginning of the year would be difficult for LADWP to comply with. LADWP, as its own balancing authority, maintains the balance of power supply and demand by managing both the generation and transmission within its

service territory. As a transmission provider, LADWP is subject to the Federal Energy Regulatory Commission's (FERC) Standards of Conduct (specifically the No Conduit Rule) that prohibit LADWP from sharing and disclosing non-public transmission information prior to it becoming public.

Similarly, non-public generation information such as maintenance outage and restart schedules are considered market-sensitive information that cannot be shared beyond the intended use and is therefore not intended for publication. Sharing this information with individuals outside of the designated groups within LADWP would require Non-disclosure Agreements (NDAs).

Comment 3: In the Permit, startups are categorized "cold" and "non-cold" for combined cycle units and simply "startup" for simple cycle units. Each startup category is subject to the time, emission concentration, and mass limits specified in the Permit whether it be scheduled startup or demand response startup. The Permit also limits the number of allowed startups for simple cycle and combined cycle units per month. LADWP would like to clarify whether the proposed limit on "Scheduled Startups" is intended to be in addition to the allowed number of startups specified in the Permit. If it is not SCAQMD's intent to distinguish the emission limits between scheduled startups and other startups, LADWP suggests that the "Scheduled Startup" definition be removed along with associated requirements mentioned in Sections (d)(5) and (e) unless the distinction between scheduled startups and other startups is justified.

3. Section (c)(9) – Shutdown Definition

"SHUTDOWN means the time period that begins when an electricity generating unit begins reducing load and flue gas temperatures fall below the minimum operating temperature of the NOx post-combustion control equipment, and ends in a period of zero fuel flow."

Comment 1: During diesel readiness testing, there are times when the unit experiences a short period of zero fuel flow when transitioning from natural gas to diesel or diesel to natural gas. LADWP suggests adding the following language to the shutdown definition:

"For dual fuel units, fuel transition period shall not be considered as shutdown."

Comment 2: LADWP seeks consideration of special permit conditions that allow multiple startups. In cases where a Permit has specific conditions that allow a combined cycle unit to abort a cold start and then restart the unit, the start and restarts count as one cold start provided that the total time does not exceed the cold start permit limit. Since

the aborted start ends in zero fuel flow, this constitutes a shutdown per the proposed definition. The subsequent start(s) will then count as a separate cold start assuming that the steam valve does not open during the previous start. If the proposed shutdown language is adopted, the unit will quickly use up its limit of five monthly cold starts. LADWP suggests the following additional language:

“For units with specific shutdown language already included in the permit but not captured in this rule, the existing permit language shall be used in determining compliance.”

4. Section (d)(3) – Table 2: Startup and Shutdown Duration Limits for Electric Generating Units Installed on or After [DATE OF ADOPTION]

Comment: LADWP would like to know if there are permitted units that have achieved the time limits listed in Table 2 and if the time limits are currently listed in the Environmental Protection Agency’s Best Available Control Technology Clearing House. If not, LADWP suggests that SCAQMD consider removing Table 2 and amending the rule at a later time when there is sufficient data showing that the limits have been achieved in practice.

5. Section (d)(4) – End of Startup

“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 NOx 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”

Comment: This rule requirement contradicts the Permit definition of end of startup. LADWP’s Permit defines end of startup as the time when the unit achieves the concentration permit limit.

When the post-combustion control equipment such as the Selective Catalytic Reduction (SCR) System reaches its minimum operating temperature, ammonia is injected to the

SCR to reduce NOx emissions so that the unit can achieve compliance with the concentration permit limit within the permitted time limit. The time for the post combustion control equipment to reach its minimum operating temperature is not the

same as the time it takes for the unit to reach compliance with its emission limit. Compliance with emission limits occurs after ammonia injection has commenced. In addition to ammonia injection, the unit has to reach a minimum load for dry low NOx technology to meet permit limit. For example, combined cycle units commence ammonia injection as early as possible during startup to minimize NOx emissions. Reaching BACT levels which signal the end of startup typically occurs after the unit has ramped up to the minimum load necessary for NOx compliance. LADWP suggests that SCAQMD revise the second sentence in Section (d)(4) as follows:

“.....If a unit reaches the permit emission concentration limit ~~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.”

Alternatively, SCAQMD could revise the definition of “Stable Condition” in Section (c)(10) as follows:

“Stable Condition means that the fuel flow to an electric generating unit is consistent ~~and allows~~ allowing for normal operations and that the unit has reached compliance with emission permit limit.”

6. Section (d)(5) – Scheduled Startup Annual Limit

“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.”

Comment: As stated in Comment 1 for Section (c)(8), if testing events are considered scheduled startups, the proposed annual limit of two is not sufficient, given the frequency of startups due to these required tests. LADWP is requesting SCAQMD to increase the number of allowed scheduled startups to accommodate scheduled testing listed in the Table A above.

7. Section (e)(1)(A) and (B) - Recordkeeping

“On and after January 1, 2024, an owner or operator of an electricity 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;

Comment: Startup and shutdown date, time and duration are all recorded in the Continuous Emissions Monitoring System (CEMS) Data Acquisition Handling System (DAHS). Requiring maintenance of a separate log for each startup and shutdown seems redundant. A report with this information can be generated from the DAHS. It is unclear why requiring operators of a generating unit to provide the reason for each startup or shutdown is necessary. Operators are already required to provide and maintain records of the date and time of scheduled startups in Section (e)(1)(B). If SCAQMD is concerned about exceedances of startup and shutdown limits, inspectors can verify them by cross-referencing exceedance dates with the scheduled startup date and time records to see if the exceedance is exempt or if it is considered a violation.

8. Section (f)(1) – Exemptions for Once-Through-Cooling (OTC) Electric Generating Units to Be Retired

Comment: To allow for flexibility in the event that the State Water Resources Control Board (SWRCB) extends the compliance deadline for the OTC units, LADWP suggests removing the December 31, 2029 date. Referencing the compliance dates set forth in Table 1 of Section 2(B) of the SWRCB'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 should be sufficient.


LADWP requests SCAQMD's consideration of these comments and the other stakeholder's comments and looks forward to working with SCAQMD for further development and changes to these rules.

Mr. Morris
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If you have any questions or would like additional information, please contact Ms. Andrea Villarin of my staff at (213) 367-0409 or Ms. Leizl Lontok at (213) 367-3779.

Sincerely,

**Katherine
Rubin**

 Digitally signed by Katherine
Rubin
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Katherine Rubin
Manager of Air and Wastewater Quality and Compliance

LL:

c: Ms. Uyen-Uyen Vo (SCAQMD)
Ms. Charlene Nguyen (SCAQMD)
Ms. Andrea Villarin (LADWP)
Ms. Leizl Lontok (LADWP)