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November 2, 2021

Attention: Charlene Nguyen
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765
Transmitted via Email: cnguyen@aqmd.gov

Subject: Vernon Public Utilities (VPU) Comments on South Coast Air Quality Management District (SCAQMD) Proposed Amended Rule 1135

Dear Ms. Nguyen,

Vernon Public Utilities (VPU, Facility ID 014502) is pleased to submit these Comments setting forth VPU's concerns regarding South Coast Air Quality Management District's (SCAQMD) Proposed Amended Rule (PAR) 1135¹. VPU has provided a brief history of VPU's operations and prior discussions with SCAQMD staff for informational purposes, as well as two alternative solutions for SCAQMD's consideration.

History/Background

VPU owns eight process units subject to the REgional CLean Air Incentives Market (RECLAIM) Program. Currently operational sources include two natural gas-fired peaking turbines (Units D1 and D2) and one diesel-fired emergency generator (Unit D25). VPU has five additional diesel-fired emergency generators (Units D3, D4, D5, D6, and D7) which are non-operational with fuel lines disconnected.

As a part of the SCAQMD's transition from the market-based RECLAIM Program to a command-and-control regulatory structure, updates to existing rules and new rules are being developed, some of which will affect VPU. For example, following sunset of the RECLAIM Program, VPU's Units D1 and D2

¹ References to PAR 1135 reflect the version dated October 22, 2021.

will be newly subject to *SCAQMD Rule 1135: Emissions of Oxides of Nitrogen (NOx) from Electricity Generating Facilities*. Rule 1135 was last amended November 2, 2018 to incorporate facilities exiting the RECLAIM Program and implement Best Available Retrofit Control Technology (BARCT) for NOx emissions from gas turbines, boilers, and select diesel internal combustion engines. SCAQMD is currently proposing additional amendments to Rule 1135 for consistency with policy changes implemented after November 2, 2018, such as requirements for Continuous Emission Monitoring Systems (CEMS).

SCAQMD has provided two options for Facilities transitioning from RECLAIM to meet the compliance requirements of Rule 1135: (1) meet the hourly NOx BARCT emission limits, as demonstrated through a CEMS; or (2) qualify for one of the exemptions provided in Rule 1135. Due to the excessive cost associated with implementing BARCT and CEMS, VPU instead plans to limit operation of Units D1 and D2 such that both units qualify for Rule 1135's Low Use Exemption and Backup Unit Exemption, as described below. VPU's Post-RECLAIM plans for its remaining units are not addressed in these Comments, as they will continue to not be subject to Rule 1135.

Previous Discussions with SCAQMD Staff

On June 22, 2021, SCAQMD's Planning, Rule Development and Area Sources staff met with VPU personnel at VPU's Station A. During this meeting, VPU personnel provided insight into the day-to-day operations of Station A, including a tour of the electricity generating units, and received a brief overview of PAR 1135 from SCAQMD staff. The tone set during this meeting was one of collaboration, in which it appeared SCAQMD wanted to (1) understand VPU's operations; and (2) work with VPU regarding the treatment of generators with minimal impact in the SCAQMD's PAR 1135.

Requiring VPU to install CEMS and/or comply with BARCT would impose additional and excessive costs to the facility.

Rule 1135 Exemptions

A discussion of the two Rule 1135 exemptions applicable to VPU's Units D1 and D2 is provided below.

Rule 1135 Low Use Exemption

To qualify for the currently-effective Low Use exemption of Rule 1135, each peaking turbine must limit operation based on a calculated annual capacity factor.² The Low Use exemption criteria for each of VPU's gas turbines are as follows (PAR 1135[g][4][A]):

- Maintains an annual capacity factor of less than ten percent averaged over three consecutive calendar years;
- Maintains an annual capacity factor of less than twenty-five percent each calendar year; and

² The annual capacity factor is the ratio between the actual measured heat input during a calendar year and the potential heat input had the unit operated continuously at the permitted heat input rating.

- Retains the NOx and ammonia limits, averaging times, startup, shutdown, and, if applicable, tuning requirements in the facility's current Title V Permit.³

In addition to the Low use Exemption criteria described above, each of VPU's peaking turbines must continue to comply with its current permitted emission limits to qualify for the Low Use exemption. Section D of VPU's Title V Permit establishes the following NOx emission limits for the peaking turbines: 91.09 pounds per million standard cubic feet (lb/MMscf) for natural gas and 20.06 pounds per thousand gallons (lb/1,000 gal) for fuel oil. Note that VPU's Title V Permit does not contain ammonia emission limits or mass- or concentration-based NOx emission limits. Per correspondence with SCAQMD's Planning and Rules Manager M. Morris, facilities will not be required to add emission limits to their existing permits in order to qualify for the Low Use exemption.⁴

PAR 1135 Backup Unit Exemption

The most recent version of PAR 1135 (October 22, 2021) includes a new means for exemption, the "Backup Unit Exemption". Under PAR 1135, Units qualifying as "Backup Units" would be exempt from the Rule 218 CEMS requirements used to demonstrate compliance with NOx emission limits until July 1, 2026. VPU's peaking units D1 and D2 would meet the new definition of a "Backup Unit" (PAR 1135[c][2]):

"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."

For a Backup Unit to be exempt from CEMS installation until July 1, 2026 (PAR 1135[e][3]), it must comply with annual NOx source testing⁵, as well as continued implementation of certain requirements (i.e., quarterly reporting of NOx emissions, submittal of source test protocols, and use of a totalizing fuel meter). Additionally, to qualify for the exemption, operation of a Backup Unit must be limited by permit condition to 1,300 hours per year.⁶

PAR 1135 As Currently Drafted Appears to Contain Contradicting Criteria for Units that Qualify as Both "Low Use" and "Backup Unit" Exempt

Per PAR 1135(g)(4)(A), equipment that qualifies as Low Use "*shall not be subject to emission limits specified under paragraph (d)(1) [Rule 1135's NOx emission limits] for that gas turbine...[and] 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.*" As previously discussed, VPU proposes to operate Units D1 and D2 in accordance with the Low Use exemption such that their

³ Note that PAR 1135 defines the "current Title V Permit" as the Permit to Operate in effect as of November 2, 2018.

⁴ September 25, 2019 phone communication between SCAQMD's M. Morris and Jacobs' E. Schwing

⁵ Per PAR 1135(e)(3)(B), annual source testing must demonstrate compliance with the NOx emission limits of this rule.

⁶ Permit applications to limit annual hours of operation must be submitted within 6 months of becoming a former RECLAIM facility (PAR 1135[e][3][I]).

operation would be subject to the Low Use exemption criteria. These criteria currently include the NOx emission limits of their current permit, which limits are not monitored using CEMS.

Also as stated above, SCAQMD's latest proposed amendments to Rule 1135 consider RECLAIM NOx process units (including NOx peaking units like VPU's Units D1 and D2) to be Backup Units. This new exemption delays the installation of CEMS, but requires annual source testing until July 1, 2026 (PAR 1135[e][3]). However, as written, the rule requires source testing to demonstrate compliance with Rule 1135's NOx emission limits (2.5 parts per million by volume [ppmv] for simple cycle turbines⁷⁷).

VPU's expectation was that Units D1 and D2 would be exempt from installing CEMS because they would meet the low use exemption criteria of PAR 1135(g)(4)(A) and would, therefore, not be subject to the NOx emission limits specified in PAR 1135(d)(1). However, with the addition of their classification as Backup Units, these units would also be required to conduct annual source testing to demonstrate compliance with Rule 1135's NOx emission limits or install CEMS prior to July 1, 2026. As currently permitted, VPU's Units D1 and D2 do not meet Rule 1135's NOx emission limits because they are not equipped with selective catalytic reduction (SCR). For this reason alone, VPU has always intended to apply for Rule 1135's Low Use Exemption for its Units D1 and D2.

As currently drafted, it is unclear how a unit eligible for both the Low Use Exemption and the Backup Unit Exemption would demonstrate compliance with the Backup Unit Exemption. Despite eligibility for the Low Use Exemption, as currently drafted PAR 1135 appears to require VPU to either (1) install CEMS for its Units D1 and D2 prior to July 1, 2026 (to demonstrate compliance with emission limits to which the units are not subject) (PAR 1135[e][3][2]); or (2) install an SCR to reduce emissions and perform annual source testing (again, to demonstrate compliance with emission limits to which the units are not subject) (PAR 1135[e][3][B]). Both options would be cost prohibitive and likely result in the near-term, permanent shutdown of VPU's Units D1 and D2, which would be in direct conflict to the goals presented in SCAQMD's October 27, 2021 Public Workshop Presentation. In that Presentation, SCAQMD stated: "PAR 1135 and [Proposed Rule] PR 429.2 do not impose additional costs to the affected facilities." Since VPU does not believe SCAQMD's intent is to force facility shutdowns, VPU is hopeful that its concerns with PAR 1135 can be resolved.

VPU's Two Alternative Proposed Solutions

As explained above, PAR 1135 appears to contain contradicting exemptions regarding CEMS and NOx emission limit requirements. To eliminate the apparent contradiction between the exemptions, VPU recommends SCAQMD take one of the following two approaches:

- Revise PAR 1135(g)(4)(A) to clarify that Units qualifying for the Low Use Exemption shall neither be subject to the Rule 1135 NOx emission limits of PAR 1135(d)(1) nor the requirement to install CEMS per PAR 1135(e)(2), without the need for annual source testing, or
- Revise PAR 1135(e)(3)(B) to require annual source testing to demonstrate compliance with the NOx emission limits of the Facility's Permit to Operate as of November 2, 2018, if applicable, instead of the NOx emission limits set forth in Rule 1135.

⁷⁷ PAR 1135(d)(1), Table 1.

We appreciate your consideration of these matters and welcome your feedback. If additional information is desired, please contact Lisa Umeda (lumeda@ci.vernon.ca.us) or Elyse Engel (elyse.engel@jacobs.com).

Sincerely,



Abraham Alemu
General Manager of Vernon Public Utilities

Copies to: Uyen-Uyen Vo/SCAQMD
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