SC DEPARTMENT *of*
ENVIRONMENTAL
SERVICES

Bureau of Air Quality
Response to Comments on Air Quality

Santee Cooper Cross Generating Station
Pineville, Berkeley County, South Carolina
Permit Number PSD-50000004 v1.0

The following is the South Carolina Department of Environmental Services, Bureau of Air Quality's (SCDES or Department) response to the comments made during the formal comment period held December 10, 2024, through January 8, 2025, regarding the draft Department for a Prevention of Significant Deterioration (PSD) air construction permit for Santee Cooper Cross Generating Station.

The written Department Decision, permit, statement of basis, this response document, and a letter of notification are located for viewing at the SCDES Columbia office located at 2600 Bull Street, Columbia SC 29201, and on our webpage at https://des.sc.gov/programs/bureau-air-quality/air-quality-department-decisions.

Hard copies of all the above-listed documents and written comments received can be requested by contacting our Freedom of Information Office at (803) 898-3882.

During the comment period, one written comment letter from EPA was received and reviewed.

1. EPA Region 4 disagrees with SCDES's position that 40 CFR 52.21(r)(4) applies in this permit action.

Response: EPA has stated 40 CFR 52.21(r)(4) ("Section (r)(4)") does not apply because the relaxation of the sulfuric acid mist (SAM) permit limit would not cause the source to become a major stationary source or major modification because SCCGS was already a major stationary source and Units 3 and 4 were part of a previous major modification. EPA also stated 40 CFR 52.21(r)(4) does not apply on a pollutant-by-pollutant basis. Based on SCDES's review of relevant law and EPA guidance, SCDES believes it has appropriately implemented section (r)(4) and that section (r)(4) can apply on a pollutant-by-pollutant basis.

The example in the Draft New Source Review Workshop Manual that was cited in the Statement of Basis supports the Department's implementation of Section (r)(4). In that

example, a facility installs new Unit G at a plant that has existing Units A through F. EPA specifically notes that "[t]he existing source is a major source." EPA goes on to explain that the facility may be able to avoid PSD for the addition of Unit G by taking an enforceable limit on Unit D; however, if the source later requests removal of the restrictions that allowed Unit G to net out of review (*i.e.*, the enforceable limit on Unit D), Unit G would then become subject to PSD review pursuant to section (r)(4) as though construction had not commenced. Thus, in this example, EPA indicated that section (r)(4) will apply based on the removal of a synthetic minor limit that had previously allowed a unit to avoid PSD review, notwithstanding that the source was already major.

Prior rulemakings addressing section (r)(4) further support the Department's view. In its 1980 preamble addressing section (r)(4), EPA discusses its general intent to prevent a source that has adopted unrealistically stringent limits to later relax those limits without becoming subject to NSR requirements that otherwise would apply were it a new source. 45 Fed. Reg. 52,676, 52,689 (Aug. 7, 1980). Nowhere does EPA suggest any intent to limit application of this provision to those cases where the source was not already major for one or more units or other pollutants. Such a reading runs contrary to EPA's stated purpose to make sure that sources that relax limits they could not achieve go through the PSD and BACT review process that would have been required had they not set those limits to begin with. In this case, had the original synthetic minor SAM limits not been established, then Units 3 and 4 would have been required to undergo PSD/BACT review for SAM. Applying section (r)(4) to Units 3 and 4 thus squares with EPA's original stated purpose, as well as the regulatory language itself.

EPA's alternative reading of section (r)(4) in its comment letter is inconsistent with the relevant guidance and is not compelled by the regulatory language. Specifically, the comment letter appears to reflect an overly restrictive interpretation of the word "solely" in section (r)(4), one contrary to that applied in other prior applicability determinations.[1] Here, while it is true that Units 3 and 4 were considered major modifications for other pollutants in 2004, upon relaxation of the synthetic minor SAM limits, Units 3 and 4 could just as easily be considered to have been a major modification "solely" on SAM grounds. In other words,

[1] *See*, *e.g.*, U.S. EPA, Region 4, "Response to Questions Regarding PPG Industries" (Aug. 8, 2001), *available at* https://www.epa.gov/sites/default/files/2015-07/documents/ppg2001.pdf (instructs not to accord the term "solely" undue significance, notes that the term is not mentioned in the preamble language, and reinforces section (r)(4)'s meaning that "[i]f a source elects to accept an enforceable limitation to avoid PSD requirements for an emissions unit or process, then a revision of that limitation for any reason … could trigger the relaxation provision"); U.S. EPA, Region 5, "Applicability of the PSD Regulation to Certain Modifications Made by Cooper Tire and Rubber Company" (Sept. 29, 1992), *available at* https://www.epa.gov/sites/default/files/2015-07/documents/cooper.pdf (explains that "solely by virtue of a relaxation" language indicates only that a source cannot evade PSD upon a relaxation of a limit through "consideration of other activities" (*e.g.*, other more recent emissions reductions/netting) in determining whether or not a modification would be major).

the fact that a major modification was ultimately triggered for other pollutants as well does not change that the facility may be viewed as having triggered a major modification solely (*i.e.*, independently) on SAM grounds, absent the synthetic minor limits that are now being relaxed. If section (r)(4) did not apply, that would subvert the regulation's basic purpose to make sure that sources relaxing unrealistic limits taken to avoid PSD actually undergo the process that would have applied originally and do not engage in "sham" permitting. SCDES has been consistent in its implementation of section (r)(4), and as a SIP approved State will continue to implement (r)(4) in this manner absent any nationally applicable rulemaking or guidance requiring another approach.

2. EPA Region 4 comments that removal of the synthetic minor SAM limits for Units 1 and 2 would authorize a change in the method of operation back to previous operations and recommends SCDES consider permitting Santee Cooper's request as a change in method of operation resulting in an emissions increase. EPA recommended two options for this approach: (i) Modify only emission limits on Units 3 and 4 and keep the limits for Units 1 and 2; or (ii) Conduct a PSD analysis on all four units resulting from a change in method of operation.

Response: The Department established the synthetic minor SAM limits on existing Units 1 and 2 to ensure the reduction of SAM emissions that resulted from the upgrades to each unit's associated SO_2 scrubber systems was sufficient to offset the increases of SO_2 and SAM from the proposed installation of Units 3 and 4, such that Units 3 and 4 could net out of PSD review. Upon these limits' removal, Units 3 and 4 are becoming subject to PSD requirements. The details of the scrubber upgrades for Units 1 and 2 can be found in the permit's statement of basis (SOB). SCDES is unaware of any modifications to Units 1 and 2 themselves that accounted for the reduction in SO_2 or SAM.

The removal of the SAM emission limits will not result in a change in method of operation for Units 1 and 2. The original PSD permit for Units 3 and 4 included SO_2 limits for Units 1 and 2 as well. In addition, all four units have multiple, more recent limits on SO_2. These limits include monitoring, record keeping, and reporting requirements to ensure SCCGS is in compliance with the SO_2 limitations, which also limit SAM emissions. The Department is not proposing to modify any of the existing SO_2 limits for any of Units 1 through 4. These existing, continuing regulatory and permit requirements for SO_2 rely on the same upgrades to the scrubber systems for Units 1 and 2 that were the basis for the SAM limit, and changes to the operation of the scrubber systems for Units 1 and 2 are not expected as a result of this permit. Any future changes to the scrubber systems would require additional permitting review.

As discussed in this permit's Statement of Basis, Santee Cooper's need to remove the SAM emission limits is the result of incorrectly estimating the SAM emissions from all four units

by relying on AP-42. There was not an understanding by the applicant or the Department at the time of other sources of SAM emissions that would occur post-combustion.

SCDES appreciates EPA Region 4's review and recommendations on the draft permit. However, SCDES does not plan to make changes for the reasons stated above.