



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

July 30, 2021

Stephanie Shealy, PE
Manager, Air Quality
Santee Cooper, Horry Generating Station
P.O. Box 2946101
Moncks Corner, South Carolina 29461-6101

Dear Ms. Shealy:

This is in response to your letter, dated May 28, 2021, to the Environmental Protection Agency (EPA) requesting an applicability determination (AD) for Title 40, Code of Federal Regulation (CFR), Part 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), as it may apply to four stationary compression ignition (CI) internal combustion engines (ICE) proposed to be installed at Santee Cooper's Horry Generating Station in Conway, South Carolina. The EPA requested additional information from you on June 28, 2021, and received the information on July 7, 2021. Based on the information provided by you, the engines, if installed at the Horry Generating Station, will be required to meet Model Year 2015 engine standards as required by Subpart IIII. The details of our AD are explained in the remainder of this letter.

Santee Cooper's Bases of Proposed Retention of 2013 Model Year Engine Standards

In 2012, Santee Cooper ordered four 2013 Model Year stationary CI ICE(s) to provide motive power (mechanical energy) for electric generators proposed for the VC Summer Site in Jenkins, South Carolina. Each engine is a Caterpillar Model No. 280-16 with a displacement capacity of 18.47 Liters per cylinder (L/cylinder) and is rated at an electrical generating capacity of 5,650 brake kilowatts (bkW). Installation of the engines was scheduled as a part of the VC Summer Site expansion project beginning in 2012, but all construction activity at the site was cancelled, and in 2014 the engines were inventoried in storage. Your position is that the engines were installed at the VC Summer Site because they were received and secured at the plant and that 40 CFR §60.4208(i) would apply to a relocation and installation of the inventoried engines at the Santee Cooper Horry Generating Station in Conway, South Carolina.

Under §60.4208(i), you note "the requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location." Under §60.4219, you note that "installed means the engine is placed and secured at the location where it is intended to be operated." You reference EPA's responses to comments regarding the proposed Subpart IIII's definition of "installed" and note that the EPA changed the definition of "installed" in the final rule because the EPA agreed with a commenter who proposed that the definition of "installed" be revised to reflect the

commenter's considerations "... that installation should be defined as the engine has been placed and secured where it is intended to be operated, and that the engine does not have to be capable of being started before it can be considered installed, since the final piping and wiring may not be completed until well after the engine is secured in its permanent location."⁽¹⁾ Additionally, you augment the basis of your interpretation by asserting the engines at the VC Summer Site were "installed" citing the EPA's agreement with the comment "... that "major commitment" and "intent" are essential to the establishment of a source's installation and that operability should not be considered."⁽¹⁾

You also noted "... that any inference that 'secured' can only mean 'is bolted to its final foundation' is arbitrary. There is no difference in 'major commitment' or 'intent' of an engine purchased and delivered to the site, ready to be set on its final foundation versus bolted to its final foundation. This discrepancy comes down to the phase of construction and timing when construction at the VC Summer site was cancelled. The 'major commitment' and 'intent' of the owner to operate the engines at the site is the same in both instances. In addition, it is arguable that 'secured' may be interpreted as purchased or obtained, and 'at the location where it is intended to be operated' is the proposed facility, in this case the VC Summer site."

The EPA's Review and Clarification of Subpart III Intent

As discussed in the preamble of the Final Rule of Subpart III (76 FR 37972, June 28, 2011), the EPA revised the definition of "installed" in Subpart III because of comments the EPA received during the comment period which were related to the proposed rule's definition of "installed." Specifically, the commenter noted that "... *creating the foundation and placing the engine at the location* indicates major commitment by the owner, and the commenter did not believe that it is necessary to *finalize the remaining connections* in order to demonstrate the owner's intent, and *such connections* are typically more related to the larger construction project than the engine itself."⁽²⁾ The EPA agreed with the comment noting "... that installation should be defined as the engine has been placed and *secured where it is intended to be operated*, and that the engine does not have to be capable of being started before it can be considered installed, since the final piping and wiring may not be completed until well after the engine is secured in its permanent location."⁽²⁾ The EPA does not agree with the suggestion that "location" under these circumstances is the entire VC Summer site. The EPA's response to the comment clearly contemplated that "installation" involved securing the engine in the precise location where all necessary connections would be installed.⁽³⁾

The EPA determined that a minimum of two criteria must be accomplished before an engine may be characterized as installed. The first criterion requires the purchase of an engine, a major commitment of the purchaser. The second criterion requires securing the engine at the permanent location, a commitment by the purchaser which identifies the precise location where the engine will be operated. Excerpts from the EPA's response to comments in the preamble "...placing the engine at the location..." and "... the engine is secured in its permanent location" clearly indicate what location means. The revision to the definition "installed" removed select language from the proposed rule's definition because of the concern expressed by the commenter which recognized that once the engine is "placed and secured" at its precise location, additional work is necessary to allow the engine to be

¹ June 2, 2011, Memorandum from EPA Energy Strategies Group to EPA Docket EPA-HQ-OAR-2010-0295.

² Standards of Performance for Stationary Compression Ignition and Spark Ignition Internal Combustion Engines, Final Rule (76 FR 37954, 37965).

³ See the definition of *stationary internal combustion engine* at the 40 CFR 60.4219 which cross-references the definition of *nonroad engine* in 40 CFR 1068.30 that defines location as any single site at a building, structure, facility, or installation.

started and operated. Specifically, the proposed rule's phrase within the definition of installed that stated "... the piping and wiring for exhaust, fuel, controls, etc., is installed and all connections are made; and the engine is capable of being started" was removed from the final definition because these activities are peripheral to, and occur after, the engine is placed at the permanent location. Although these installation activities are peripheral to, and occur after, the engine is placed in its permanent location, these activities are not associated with an engine placed in a storage facility.

Applicable Requirements of Subpart IIII

Under §60.4200(a)(2)(i), provisions of Subpart IIII are applicable to owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines. For the purposes of Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator. Under §60.4200(a)(4), the provisions of §60.4208 of Subpart IIII are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005. Under §60.4208(f), after December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 Model Year non-emergency engines. Under §60.4204(b), owners and operators of 2007 Model Year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 Model Year and later stationary CI ICE. Under §60.4201(e)(2), for 2014 Model Year and later (*e.g.*, 2015 model year) non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder, stationary CI internal combustion engines must be certified to the certification emission standards and other requirements for new marine CI engines in 40 CFR §§1042.101, 1042.107, 1042.110, 1042.115, 1042.120, and 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power.

The EPA's Applicability Determination

Based on all available information, the EPA concludes the engines were never installed at the VC Summer site; as a result, §60.4208(i) does not apply and the proposed installations at the Horry Generating Station require the engines to meet 2015 Model Year engine standards under Subpart IIII. The basis of the EPA's determination is that the engines were never secured at the precise locations where all necessary connections would be installed.

In closing, the EPA notes that the engines could be installed at the Horry Generating Station only if the engines were rendered capable of meeting all applicable requirements for 2015 Model Year engines. This AD was coordinated with the EPA Region 4 Enforcement and Compliance Assurance Division, the EPA's Offices of General Counsel, Enforcement and Compliance Assurance and Air Quality Planning

and Standards. If you have any questions about this AD, please contact Tracy Watson at (404) 562-8998, or by email at watson.marion@epa.gov.

Sincerely,

**KENNETH
MITCHELL** Digitally signed by
KENNETH MITCHELL
Date: 2021.07.30
12:33:50 -04'00'

For Caroline Y. Freeman
Director
Air and Radiation Division

cc: Sara Ayres, EPA OECA
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