



Revisions to the Source-Specific Federal Implementation Plan for Four Corners Power Plant, Navajo Nation

Final Rule

Responses to Comments

January 2017

The EPA's proposed rule, titled "Revisions to the Source-Specific Federal Implementation Plan for Four Corners Power Plant, Navajo Nation," published in the Federal Register on December 2, 2016. The 30-day comment period for our proposed rule closed on January 3, 2017. We received 3 comment letters prior to the close of the comment period.¹ All comment letters we received were generally supportive of our proposed action. Two of the letters requested additional clarification or recommended additional revisions to the FCPP FIP.

Comment 1: A consortium of non-governmental organizations commented in support of the proposed revisions to the FCPP FIP and agreed with our assessment that the proposed revisions would strengthen the FIP. The consortium encouraged the EPA to finalize the proposed revisions to the FCPP FIP.

Response 1: The EPA is taking final action on our proposed rule to revise the FCPP FIP.

Comment 2: One commenter recommended several revisions to 40 CFR 49.5512(f) pertaining to the requirements for notifications. The commenter first stated that the result of the EPA's proposed revision to 40 CFR 49.5512(f), *i.e.*, the requirement to submit notifications to both the EPA and the NNEPA ("dual notification requirement"), would be to limit the dual notification requirement only to those submittals required under paragraph (f), such that submittals required under other paragraphs in 40 CFR 49.5512, including paragraphs (e) and (j), would not be subject to the dual notification requirement. The commenter recommended that the EPA revise paragraph (f) to apply the dual notification requirement to all notifications required under "this section" rather than under "this paragraph (f)." Next, the commenter noted that some provisions in the FIP require APS to notify the

¹ See letter dated December 22, 2016, from Andrea Issod, Sierra Club Environmental Law Program, Dan Olson, San Juan Citizens Alliance, Erik Schlenker-Goodrich, Western Environmental Law Center, and Carol Davis, Dine Citizens Against Ruining our Environment, to Anita Lee, EPA; see letter dated December 29, 2016, from Donald Benn, Navajo Nation Environmental Protection Agency, to Anita Lee, EPA; see letter dated January 3, 2017 from Chas Spell, Arizona Public Service, to Gina McCarthy, EPA.

EPA of specific actions, but that the dual notification requirement only applies to required notifications to the Regional Administrator or Administrator. The commenter recommended that the EPA revise paragraph (f) to add that required notifications to the EPA are also subject to the dual notification requirement. Finally, the commenter noted that if the EPA revises paragraph (f) to apply to all provisions in 40 CFR 49.5512, we should add the term “petitions” to the types of documents that would be submitted under paragraph (f), because the term “petitions” appears in a similar notification requirement in paragraph (k)(7).²

Response 2: The EPA agrees with the commenter that the proposed revision to 40 CFR 49.5512(f) would have limited the dual notification requirement. The EPA did not intend to limit the dual notification requirement to only those things described in paragraph (f). We also agree with the commenter that there are provisions in the FCPP FIP that require APS to notify the EPA of specific actions, and that the term “the EPA” is not included in the proposed revisions to paragraph (f). Finally, we agree with the commenter that the term “petitions” should be included in the types of documents that would be subject to the dual notification requirement because these petitions refer to provisions of the Consent Decree, which we proposed to include in the FCPP FIP in 40 CFR 49.5512(k)(2)(iii), that allow APS to petition the EPA for a revised NO_x emission limitation. Therefore, in this final action, we are amending the beginning portion of paragraph (f), as recommended by the commenter, to read “All requests, reports, submittals, notifications, petitions, and other communications to the Regional Administrator, Administrator, or the EPA, required by this section and references therein, shall be submitted . . .”³ As a result, all required notices must be sent to both the EPA and NNEPA.

² These “petitions” refer to the process established in the Consent Decree that allows APS to petition the EPA for a revised NO_x emission limitation.

³ For clarity, we have included a document titled “FCPP FIP reg text RLSO for NFR.docx” in the docket for this rulemaking to indicate in red-line/strike-out text the changes to the original FCPP FIP that we are promulgating in this final rulemaking.

Comment 3: One commenter noted that the proposed revision to 40 CFR 49.5512(e)(3) was ambiguous because it did not specify to whom the notifications required in the paragraph should be sent. The commenter recommended that the EPA revise paragraph (e)(3) to specify that the required written notifications be sent by APS to the Regional Administrator, and therefore would be subject to the dual notification requirement in paragraph (f).

Response 3: The EPA agrees with the commenter that proposed revisions to 40 CFR 49.5512(e)(3) did not specify to whom the required notification should be sent. Therefore, in this final action, the EPA is amending the relevant sentences in paragraph (e)(3), as recommended by the commenter, to specify that written notification must be submitted to the Regional Administrator.

Comment 4: One commenter stated that the proposed dual notification requirement in 40 CFR 49.5512(k)(7) is redundant to the notification requirements in paragraph (f), particularly if the EPA revises paragraph (f) as recommended by the commenter to apply to all provisions in 40 CFR 49.5512 (as discussed in Comment 2).

Response 4: The EPA agrees with the comment that the reporting requirement proposed in 40 CFR 49.5512(k)(7) is redundant with the requirements in 40 CFR 49.5512(f). Therefore, in this final action, the EPA is removing the proposed reporting requirement in paragraph (k)(7).

Comment 5: One commenter recommended that the EPA revise the definition of PM in 40 CFR 49.5512(k)(1)(xvii) to include both filterable and condensable PM because paragraph (k)(5) requires annual source testing for filterable PM and condensable PM. The commenter suggests that it is inaccurate to define PM as only filterable PM when the Consent Decree also addresses condensable PM.

Response 5: The EPA disagrees with the comment that the definition of PM in 40 CFR 49.5512(k)(1)(xvii) is inaccurate. We note that the definition of PM in the Consent Decree in Section III.40 is identical to the definition we proposed in 40 CFR 49.5512(k)(1)(xvii). The emission limitation for

PM in the Consent Decree is based only on filterable PM. The inclusion of condensable PM in the definition of “PM” as recommended by the commenter would thus be inaccurate, and would change the stringency of the numerical emission limitation for PM established in the Consent Decree. Although paragraph (k)(5)(v) requires the owner or operator to conduct an annual “PM stack test for condensable PM at FCPP Units 4 and 5, using the reference methods and procedures set forth at 40 CFR part 51, Appendix M, Method 202”, this requirement is separate from the requirement at paragraph (k)(5)(iv) to conduct annual stack tests for PM using the reference methods and procedures (filterable portion only) specified in 40 CFR part 60, App. A-3, Method 5.” In addition, paragraph (k)(5)(v) applicable to testing for condensable PM further states that “the results of the PM stack test conducted pursuant to this paragraph shall not be used for the purpose of determining compliance with the PM Emission Rates required by paragraph (k).” Thus, the specific language in paragraph (k)(5)(v) stating that the results of source tests for condensable PM shall not be used for compliance with the PM emission limitations in paragraph (k) make clear that the Consent Decree defines PM as filterable PM. We recognize that the use of the term “PM” within the requirements to conduct stack tests for condensable PM in paragraph (k)(5)(v) creates confusion because the term “PM” is specifically defined in the proposed FIP as filterable PM. Therefore, in this final action, the EPA is amending paragraph (k)(5)(v) to read:

Once each calendar year, the owner or operator shall conduct a stack test for condensable particulate matter at FCPP Units 4 and 5, using the reference methods and procedures set forth at 40 C.F.R. Part 51, Appendix M, Method 202 and as set forth in paragraph (iv). This test shall be conducted under as similar operating conditions and as close in time as reasonably possible as the test for PM in paragraph (k)(5)(iv). Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or Malfunction. The sampling time for each run shall be at least 120 minutes and the volume of each run shall be at least 1.70 dry standard cubic meters (60 dry standard cubic feet). The owner or operator shall calculate the number of pounds of condensable particulate matter emitted in lb/MMBtu of heat input from the stack test results in accordance with 40 CFR 60.8(f). The results of the condensable particulate matter stack test conducted pursuant to this paragraph shall not be used for the purpose of determining compliance with the PM Emission Rates required by

paragraph (k). The results of each condensable particulate matter stack test shall be submitted to EPA within sixty (60) Days of completion of each test. If EPA approves a request to demonstrate continuous compliance with an applicable PM Emission Rate at a Unit using PM CEMS under paragraph (k)(5)(iii), annual stack testing for condensable particulate matter using the reference methods and procedures set forth at 40 CFR part 51, Appendix M, Method 202 is not required for that Unit.

Comment 6: One commenter noted two typographical errors in 40 CFR 49.5512(k), at paragraphs (k)(2)(i) and (k)(4)(i). The commenter recommended that the EPA replace an “or” in the first sentence of paragraph (k)(2)(i) with a “the.” The commenter further recommended that the EPA add the word “by” to the first sentence of paragraph (k)(4)(i), to refer to “any emission limitation required by paragraph (k).”

Response 6: We agree with the commenter that there are typographical errors in 40 CFR 49.5512(k)(2)(i) and (k)(4)(i). Therefore, in this final action, we are amending the first sentence in paragraph (k)(2)(i) to remove the word “or” and we are amending the first sentence in paragraph (k)(4)(i) to add the word “by.”

Comment 7: One commenter recommended that the EPA incorporate Section VII of the Consent Decree, entitled “Prohibition on Netting Credits or Offsets” into the FCPP FIP. The commenter noted that paragraph 152 of the Consent Decree specifically stated that “limits on use of emission credits” are to be included in the FCPP FIP.

Response 7: We agree with the comment that Section VII of the Consent Decree should be included in the FCPP FIP. In this final action, we are adding the provisions pertaining to the prohibition on netting credits and offsets to paragraph (k)(7). Adding these provisions from the Consent Decree to the revised FIP will ensure continued enforceability after the Consent Decree is terminated.

Comment 8: One commenter disagreed with the EPA’s characterization in the proposed rule that the existing FIP provisions provide an exemption or exclusion from the opacity standard during

periods of saturated stack. The commenter argued that the opacity limit does apply continuously, but the prior FIP provisions merely provided FCPP with “flexibility” to demonstrate compliance with the opacity limit by different means. The commenter stated that in the event a high opacity reading occurs, the existing FIP provides a “presumption” of compliance with the opacity limit during periods of saturated stack conditions if the baghouse is operating within its normal operating parameters and if the baghouse is not fully closed. The commenter opined that the language in the existing FIP is thus not inconsistent with the 2015 SSM Action because at no time are the units at FCPP actually exempt from compliance with the opacity emission limitation. Aside from disagreeing with the EPA’s analysis of the prior FIP provisions, the commenter primarily focused on what it considers more appropriate requirements for monitoring compliance with the opacity limit. The commenter thus opined that a continuous VE performance test, during the duration of saturated stack conditions, is not necessary and recommended that the EPA assure compliance with the opacity limitation through the combined use of COMS, demonstrations that the baghouse is operating within its normal operating parameters, demonstrations that the baghouse is not fully closed, and periodic (*i.e.* monthly) VE performance tests in accordance with EPA Reference Method 9 whenever saturated stack conditions occur.

Response 8: The EPA and commenter appear to agree that the opacity emission limitation should be read to apply continuously and that any form of credible evidence should be useable to determine compliance with the opacity emission limitation. The EPA and commenter also agree that the revisions will improve the FIP. The commenter appears to agree with the EPA’s proposed replacement of the provisions related to the COMS in 40 CFR 49.5512(e) with revised opacity provisions in 40 CFR 49.5512(e)(6), provided the EPA accepts the commenter’s recommendation to require monthly VE performance tests if the baghouse is operating normally and is not fully closed in the event of a high opacity reading in paragraph (e)(6)(i). The commenter disagrees with the EPA’s characterization in the preamble of our proposal that the existing FIP provision related to water vapor results in an

“exemption” from continuous compliance and also disagrees with the EPA’s proposal to require continuous VE performance tests during saturated stack conditions.

We proposed revisions in 40 CFR 49.5512(e)(6) so that if the opacity standard applies (*i.e.* APS has not chosen to demonstrate compliance with the PM emission limitation using PM CEMS), APS would have three options for demonstrating compliance with the opacity standard. The first option, in paragraph (e)(6)(i), which is the subject of this comment, would have required the use of the existing COMS during dry (unsaturated) stack conditions, and required VE performance testing for the duration of saturated stack conditions.⁴ As noted in our proposed rule, because condensed water vapor in the stack impedes the accuracy of the COMS, we consider VE performance testing for the duration of the saturated stack condition to provide a reasonable demonstration of compliance with the opacity standard, assuming these saturated stack conditions occur infrequently.⁵ As noted by the commenter, the stacks at FCPP Units 4 and 5 are currently dry and only in rare instances have saturated stack conditions occurred in the past.⁶

However, APS is in the process of converting the ductwork and stacks for Units 4 and 5 to withstand wet stack conditions, and therefore, saturated stack conditions are expected to be more frequent during future operations.⁷ The Consent Decree requires this conversion to be completed on one unit by March 31, 2018, and on the second unit by July 31, 2018. After that conversion, the stacks are likely to be saturated more frequently. Therefore, after the conversion to wet stacks, when the stacks at FCPP experience saturated stack conditions with greater frequency and/or consistency, continuous VE performance testing (for the duration of the saturated stack condition) would be

⁴ See proposed rule at 81 FR 86988 at 86994 (December 2, 2016).

⁵ *Id.*

⁶ See APS comment letter dated January 3, 2017 at page 3.

⁷ *Id.*

impractical.⁸ Therefore, in this final action, we are amending 40 CFR 49.5512(e)(6) to make the option in paragraph (e)(6)(i) (the use of COMS during dry stack conditions and VE performance testing during the duration of the saturated stack conditions) available only until March 31, 2018 on Unit 5 and July 31, 2018 on Unit 4, the dates by which APS must convert those units to wet stacks. Because the option in paragraph (e)(6)(i) will only be available when the stacks are consistently dry, the requirement to conduct VE performance testing during the duration of saturated stack conditions (which are infrequent and typically short in duration), provides a reasonable and feasible method for demonstrating compliance with the opacity standard.

After the stacks are converted to wet stacks in 2018, the option in paragraph (e)(6)(i) to use COMS with VE performance testing for the duration of saturated stack conditions will no longer be available. This means that in the rule we are finalizing today, APS will have only three options for addressing the opacity standard after March and July 2018. The three options are: (1) use PM CEMS to demonstrate compliance with the 0.015 lb/MMBtu PM emission limitation, in which case the opacity standard does not apply; (2) use of CPMS with periodic VE performance testing to demonstrate compliance with the opacity standard; or (3) use of a bag leak detection system with periodic VE performance testing to demonstrate compliance with the opacity standard. As discussed in Response 9 below, there will be a brief period after APS completes its modifications to the ductwork and stacks when APS will be testing and tuning the new equipment. During that period, we are finalizing a provision in 40 CFR 49.5512(e)(6) to allow APS either: (i) to use the COMS during dry stack conditions and conduct weekly VE performance testing during saturated stack conditions to demonstrate compliance with the opacity standard, or (ii) to use the PM CEMS to demonstrate compliance with a PM emission limitation

⁸ We also noted in our proposed rule that condensed water vapor in the stack impedes the accuracy of the COMS, but continuous VE performance testing if the stacks are consistently saturated may be impractical. See proposed rule at 86994.

of 0.030 lb/MMBtu, in which case the opacity standard does not apply. This provision is limited to the period between the conversion to the wet stacks and the compliance dates in the Consent Decree of March 31, 2018 and July 31, 2018.

These revisions to the FCPP FIP improve the clarity and enforceability of the compliance determination for the opacity standard during saturated stack conditions, and are consistent with the NSPS for EGUs. The NSPS for EGUs includes methods that the EPA considers adequate for purposes of determining compliance and supporting enforcement for opacity limits at this type of source. We are finalizing some changes to our proposal as discussed above that are consistent with the comments we received, specifically comments recommending a different frequency for VE performance testing.

We are also adding a provision that will require APS to notify the EPA and NNEPA of the method that APS will use to demonstrate compliance with the opacity standard (i.e. CPMS or bag leak detection in conjunction with periodic VE performance testing) or the use of the PM CEMS for demonstrating compliance with the PM emission limitation of 0.015 lb/MMBtu.

We are also correcting a provision in the regulatory text that will be inconsistent with the revisions we are finalizing in this action. 40 CFR 49.5512(d)(4) states that the opacity standard in paragraph (d)(4) and associated requirements in paragraphs (e) and (f) (i.e., Testing and Monitoring, and Reporting and Recordkeeping Requirements), would not apply if APS operates its PM CEMS under paragraph (e)(3). Paragraph (e)(3) provides three options for demonstrating compliance with the emission limitation in paragraph (d)(2). Paragraph (d)(2), however, is the PM emission limitation from the 2007 FIP of 0.050 lb/MMBtu. APS cannot be relieved of complying with the opacity standard if its PM CEMS are only used for determining compliance with the emission limitation of 0.050 lb/MMBtu in

paragraph (d)(2).⁹ In this final rule, the EPA is amending paragraph (e)(3) to state that the provisions of paragraph (e)(3) are used to assure continuous compliance with the PM limits in paragraphs (d)(2) and (i)(1), which is the 2012 emission limitation of 0.015 lb/MMBtu. This revision is necessary to ensure that the provisions in the opacity standard in paragraph (d)(4) are consistent with the 2015 SSM Action. For additional clarity, the EPA is also amending paragraph (d)(4) to add the underlined provisions: “The opacity standard in this paragraph (d)(4) and associated requirements in paragraphs (e) and (f) to demonstrate compliance with the opacity standard shall not apply to any unit for which the owner or operator installs, calibrates, maintains, and operates particulate matter CEMS under paragraph (e)(3) to demonstrate compliance with its PM emission limitation in paragraph (i)(1).”

Comment 9: One commenter requested that the EPA provide time to the operator to recertify the PM CEMS after completion of the conversion of Units 4 and 5 to wet stacks. The proposed FIP provisions incorporating the requirements of the Consent Decree require the operator to install selective catalytic reduction (SCR) and convert the existing duct work and stacks to wet stacks on one unit by no later than March 31, 2018, and on the other unit by no later than July 31, 2018. The commenter stated that the operator plans to complete the installation of SCR and conversion to wet stacks earlier than required in the Consent Decree to allow sufficient time for tuning and testing of the new equipment. The commenter stated that although the proposed FIP provisions provide several options for demonstrating compliance with the opacity standard, including use of PM CEMS as a continuous parametric monitoring system (CPMS), the operator has no experience operating a PM CEMS under wet stack conditions and it would be unlikely that the operator could use CPMS until the operator

⁹ See 2015 SSM Action at 80 FR 33840 at 33891 and 33892 (June 12, 2015), stating that “States evaluating how best to replace impermissible SSM exemptions from opacity standards may wish to consider a similar approach conditioned upon the use of PM CEMS and a sufficiently stringent PM emission limitation,” and footnote 148, which indicates that 0.030 lb/MMBtu is deemed sufficiently stringent because the contribution of filterable PM to opacity at PM levels of 0.030 lb/MMBtu or less is generally negligible and that those units will therefore operate with little or no visible emissions (*i.e.*, less than 5 percent opacity).

identifies the appropriate range for the parameter being monitored by the CPMS. Therefore, the commenter requested that the EPA establish a compliance date for the optional methods for determining compliance with the opacity standard in 40 CFR 49.5512(e)(6) of March 31, 2018 on one unit, and after July 31, 2018 for the second unit.

Response 9: The EPA proposed that the revisions to the FCPP FIP would apply upon the effective date of the final rule. Therefore, as proposed, the operator would be required to comply with the opacity standard consistent with the options provided in 40 CFR 49.5512(d)(4) and (e)(6), prior to and following the installation of SCR and conversion to wet stacks. The commenter requested that the EPA amend 40 CFR 49.5512(e)(6) so that that the alternative opacity compliance demonstrations in paragraph (e)(6) commence after March 31, 2018 for one unit, and July 31, 2018 for the other unit. Although the commenter cites to the need for additional time to recertify its PM CEMS following the conversion to wet stack conditions, 40 CFR 49.5512(e)(6) does not address PM CEMS. The optional use of PM CEMS to comply with the PM emission limitation (0.015 lb/MMBtu) is found in 40 CFR 49.5512(e)(3) and 40 CFR 49.5512(d)(4). The latter section provides that the opacity standard shall not apply if the operator chooses the use PM CEMS to comply with the PM emission limitation. Thus, the revisions recommended by the commenter, to establish compliance dates for the alternative opacity compliance demonstrations in paragraph (e)(6), do not appear to remedy the concern addressed related to PM CEMS, because the commenter's recommended revision does not address any provisions related to PM CEMS.¹⁰

We recognize that the operating conditions at FCPP will change following the installation of SCR

¹⁰ The commenter's recommended revision would provide only one way to comply with the opacity standard (*i.e.*, the use of PM CEMS such that the opacity standard does not apply consistent with 40 CFR 49.5512(d)(4)) until March 31, 2018 for one unit or July 31, 2018 for the other unit, and would only make the alternative opacity compliance demonstrations in paragraph (e)(6) available after the installation of SCR and conversion to wet stack conditions.

and the conversion to wet stacks on each unit, and that these changes may require the operator to recalibrate the PM CEMS, or to calibrate the PM CEMS for use as a CPMS, as well as require additional time to tune and test the new equipment. Therefore, we agree with the commenter that additional time is necessary. However, we find that the recommended revision from the commenter does not completely achieve this intended purpose. The EPA understands that the modifications to convert Units 4 and 5 to wet stacks have not yet been completed. Unless APS elects to use PM CEMS to comply with its PM emission limitation in paragraph (i)(1), the opacity standard for each unit would apply. Therefore, the options for demonstrating compliance with the opacity limit (*i.e.*, COMS and VE performance testing, or CPMS or a bag leak detection system and periodic VE performance testing), should be available options upon the effective date of the final rule if APS does not elect to use PM CEMS for demonstrating compliance with the PM emission limit. However, in the interest of providing APS additional time to recertify the PM CEMS or CPMS, as applicable, following the conversion to wet stacks (but prior to the compliance dates for the stack modifications in the Consent Decree), in this final action, we are adding provisions to paragraphs (e)(3) and (e)(6) of 40 CFR 49.5512 to provide that the requirements of paragraph (e)(3) and (e)(6) apply upon the effective date of this final rule, but that following conversion of the ductwork and stack for Units 4 and 5 to wet stacks, the compliance dates for paragraph (e)(3) and (e)(6) shall be March 31, 2018 for Unit 5 and after July 31, 2018 for Unit 4.¹¹ This revision would allow the operator to use the options for demonstrating compliance with the opacity standard (if applicable) immediately upon the effective date of the final rule, but would also establish a new compliance date after the conversion to wet stacks to provide time to recertify the PM CEMS (under paragraph (e)(3)) or develop parameters to use the PM CEMS as a CPMS (under paragraph (e)(6)). This revision is consistent with the Consent Decree because it does not change any compliance dates in the Consent Decree for

¹¹ The provisions in paragraph (k)(2) and (3) require the installation of SCR and conversion to wet stacks on Unit 5 by no later than March 31, 2018 and on Unit 4 by no later than July 31, 2018.

the conversion to wet stacks required in 40 CFR 49.5512(k)(ii) and (iii).

As discussed in Response 8, we are modifying the provision at 40 CFR 49.5512(e)(6)(i) to make this option for determining compliance with the opacity standard (*i.e.*, use of COMS during dry stack conditions and use of VE performance testing during the duration of the wet stack condition) available only until March 31, 2018 for Unit 5 and July 31, 2018 for Unit 4, because this option would no longer be reasonable for demonstrating compliance with the opacity standard in stacks after those dates because we anticipate the stacks will experience saturated conditions more frequently and/or consistently. However, during the period following the completion of the modifications for the wet stacks and the compliance dates in the Consent Decree, APS will be testing and tuning the new equipment, as well as recertifying its PM CEMS or CPMS. Therefore, we anticipate that during this period, the use of the provisions in paragraph (e)(6)(i) may be necessary because the PM CEMS and/or CPMS may not yet be available for this purpose. As noted in Response 8, continuous VE performance testing (during the duration of saturated stack conditions) when the stacks are more frequently and/or consistently saturated as a result of the conversion to wet stacks would be impractical. Therefore, for the short period between the completion of the modifications to convert the stacks to withstand wet conditions, and the compliance date in the Consent Decree, we are adding a provision in paragraph (e)(6) to require APS to either demonstrate compliance with the opacity standard using COMS if the stacks are dry, and weekly VE performance testing if the stacks are saturated, or use the PM CEMS to demonstrate compliance with a PM emission limitation of 0.030 lb/MMBtu, in which case the opacity standard does not apply during this period.¹²

¹² Although we anticipate that the modifications to the ductwork to allow the stacks to withstand wet conditions in order to increase the SO₂ removal efficiency of the scrubbers will result in stacks that experience wet stack conditions more consistently, we recognize there may be some uncertainty that the stacks will be saturated at all times following the modifications. On page 3 of its comment letter, APS stated: "As a result of these changes APS anticipates that saturated stack conditions will be more prevalent during future operations." Therefore, during this

Comment 10: One commenter requested that the EPA provide additional discussion of a CPMS and how a non-certified PM CEMS could be approved as a CPMS.

Response 10: We proposed several options for demonstrating compliance with the PM emission limitation and the opacity standard, including the use of a CPMS in accordance with 40 CFR part 63 subpart UUUUU. Provisions for a CPMS are included in 40 CFR 63.10010(h) and 40 CFR 63.10023, and they state that the operating principle of a PM CPMS must be based on, *e.g.*, *in-situ* or extractive light scatter or beta attenuation detection of the exhaust gas and be expressed as milliamps, PM concentration, or other raw data signal value. A certified PM CEMS must meet “Performance Specification 11 – Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources” (“PS-11”).¹³ The provisions of PS-11 state that several different types of PM CEMS technologies (*e.g.* light scattering, beta attenuation, etc.) can be designed with *in-situ* or extractive sample gas handling systems. Thus, a PM CEMS and a CPMS are based on the same technologies, but, as stated in the preamble to the NSPS for EGUs, a “PM CPMS does not need to meet the requirements for a PM CEMS under PS 11,” and the “PM CPMS will not be correlated as a PM CEMS under PS 11 and will produce data in terms of a signal you define.”¹⁴ Therefore, the EPA generally considers a PM CEMS to be approvable as a CPMS if it meets the requirements in 40 CFR part 63 subpart UUUUU, even if it does not meet PS-11.

Comment 11: One commenter requested that the EPA revise the proposed provisions at 40 CFR 49.5512(d)(6)(ii) and (iii) to remove the requirement to conduct periodic VE performance tests from two options for demonstrating compliance with the opacity standard, the CPMS option and the option requiring a bag leak detection system. The commenter argued that the use of either a CPMS or a bag

brief period after wet stack conversion but before the compliance dates in the Consent Decree, we retain the use of COMS in the event the stacks are dry.

¹³ See 40 CFR part 60 appendix B, Performance Specification 11.

¹⁴ See 77 FR 9303 at 9372 and 9384 (February 16, 2012).

leak detection system alone are sufficient for demonstrating compliance with the opacity standard and that neither of those options need to be supplemented with periodic VE performance tests.

Response 11: The EPA disagrees with this comment. We note that the NSPS for EGUs at 40 CFR 60.49Da(a)(3) provides that operators of facilities that meet the conditions of 40 CFR 60.49Da(a)(2), *e.g.*, facilities that use a baghouse and install and operate a bag leak detection system under 40 CFR 60.49Da(a)(2)(i), may elect to conduct periodic VE performance testing as an alternative to using a COMS. The NSPS for EGUs, at 40 CFR 60.49Da(a)(3), allows periodic VE performance testing in lieu of COMS if the facility meets certain conditions (*e.g.* use of a baghouse with a bag leak detection system that is installed and operated according to the requirements in paragraph 40 CFR 60.48Da(o)(4)(i) through (v)).¹⁵ Thus, the use of a bag leak detection system, or the other alternatives under 40 CFR 60.49Da(a)(2), does not completely replace the need for opacity monitoring because the opacity standard would still apply. The revisions we proposed at 40 CFR 49.5512(d)(6)(ii) and (iii) require periodic VE performance testing using the procedures specified in 40 CFR 60.49Da(a)(3). This is consistent with the NSPS for EGUs. Although FCPP is not subject to the NSPS for EGUs, the NSPS for EGUs represents the Agency's current view on what is adequate for compliance assurance and enforcement of opacity limits at such sources. Therefore, in this final action, the EPA is not removing the periodic VE performance testing requirements under 40 CFR 49.5512(d)(6)(ii) and (iii).

Comment 12: One commenter requested that the EPA amend 40 CFR 49.5512(e)(2) to provide for the operator to use its SO₂ CEMS at the FGD inlet for determining the SO₂ concentration at the inlet to the FGD, in addition to the current method that relies on calculations of the daily average percent sulfur and the heat content (in British Thermal Units or BTUs) of the coal combusted in the boilers. The

¹⁵ The frequency of required VE performance testing in the NSPS for EGUs ranges from every 45 days if the maximum 6-minute average opacity is greater than 10 percent during the initial performance test, to every 12 months if the maximum 6-minute opacity is less than or equal to 5 percent during the initial test.

commenter recommended the following additions (underlined) for the relevant provisions at 40 CFR 49.5512(e)(2):

(2) **Sulfur Dioxide.** For the purpose of demonstrating compliance with this section, the sulfur dioxide inlet concentration (in lb/MMBtu) shall be calculated using the daily average percent sulfur and BTU content of the coal combusted, or after the installation of the SO₂ and any diluent CEMS required under paragraph (k)(3)(v), compliance with the provisions of paragraph (k)(3)(vi). If the sulfur dioxide inlet concentration is calculated [t]he inlet sulfur concentration and BTU testing shall be . . .

Response 12: The existing FIP requirements in 40 CFR 49.5512(d)(1) provide that the owner or operator shall not discharge SO₂ in excess of 12.0 percent of the potential combustion concentration assuming all the sulfur in the coal is converted to SO₂. The provisions at 40 CFR 49.5512(e)(2) require the owner or operator to calculate the SO₂ inlet concentration to use the daily average percent sulfur and BTU content of the coal combusted. The proposed FIP revisions to incorporate the requirements of the Consent Decree into paragraph (k)(3) require the owner or operator to maintain a 95.0 percent SO₂ removal efficiency and to determine the SO₂ removal efficiency using an SO₂ and diluent CEMS in addition to the SO₂ outlet CEMS.¹⁶ The commenter is requesting the ability to comply with the requirement in 40 CFR 49.5512(e)(2) using the inlet SO₂ and diluent CEMS required in the proposed provisions at paragraph (k)(3)(v). Because the requirements in paragraphs (d)(1), (e)(2), and (k)(3) pertain to SO₂ removal efficiencies or methods for determining compliance with the SO₂ removal efficiency requirements, the EPA considers it appropriate to streamline the methods for determining compliance with the removal efficiencies such that the method required in paragraph (k)(3), *i.e.*, SO₂ and diluent CEMS at the FGD inlet. In the final rule, APS can use the SO₂ and diluent CEMS at the FGD inlet in lieu of the requirements in paragraph (e)(2), *i.e.*, coal sampling and characterization, to determine compliance with the requirement in paragraph (d)(1). Therefore, in this final action, the EPA is amending

¹⁶ See proposed FIP provisions for 40 CFR 49.5512(k)(3)(iii) and (v).

40 CFR 49.5512(e)(2) as recommended by the commenter.

Comment 13: One commenter expressed concerns with the provision in the proposed FIP requiring APS to provide all submittals to both the Director of the Enforcement Division and the Director of the Air Division at Region IX of the EPA. The commenter opined that this expands the compliance burden of the operator without achieving any benefits for ensuring compliance or protecting the environment. The commenter recommended that the EPA require submittal of notifications to the Regional Administrator of Region IX and the Director of the Navajo Nation Environmental Protection Agency.

Response 13: We agree with the commenter that our proposed revision to require the operator to provide all submittals to both the Director of the Enforcement Division and the Director of the Air Division is not necessary. Although the EPA considers any additional burden for the proposed notifications to two offices of the agency to be small, we are amending the provisions at 40 CFR 49.5512(f) as recommended by the commenter.