

**Technical Support Document**

For the Final Rule

on

Source-Specific Federal Implementation Plan for Navajo Generating Station;

Navajo Nation

December 7, 2009

## ABBREVIATIONS AND ACRONYMS

### Pollutants

CO <sub>2</sub>	Carbon dioxide
NO <sub>x</sub>	Nitrogen oxides
O <sub>3</sub>	Ozone
PM	Particulate matter
SO <sub>2</sub>	Sulfur dioxide

### Units

MW	megawatt
TPY	tons per year

### Acronyms

APS	Arizona Public Service
ASTM	American Society for Testing and Materials
BART	Best Available Retrofit Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAMR	Clean Air Mercury Rule
CEM	Continuous Emissions Monitor
EDF	Environmental Defense Fund
EGU	Electric Generating Unit
EIA	Environmental Impact Assessment
EPA	United States Environmental Protection Agency
FCPP	Four Corners Power Plant
FIP	Federal Implementation Plan
GHG	Greenhouse Gas
NAAQS	National Ambient Air Quality Standards
NGS	Navajo Generating Station
NPS	National Park Service
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
TAR	Tribal Authority Rule
TIP	Tribal Implementation Plan
WELC	Western Environmental Law Center

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**I. Background:**

In an accompanying Federal Register notice, the Environmental Protection Agency (EPA) is finalizing a source-specific Federal Implementation Plan (FIP) to regulate emissions of several air pollutants from the Navajo Generating Station (NGS), a privately owned and operated coal-fired power plant located on the Navajo Indian Reservation near Page, Arizona. Based on lease agreements signed several decades ago, NGS was constructed and has been operating on real property held in trust by the federal government for the Navajo Nation. The facility consists of three coal-fired electric utility steam generating units with a total capacity in excess of 2000 megawatts (MW). NGS burns coal mined from the Navajo Coal Mine.

In 1999, EPA initially proposed to promulgate a FIP to regulate emissions from NGS. At that time, NGS had historically followed certain emissions limits in the Arizona SIP. However, because the Arizona SIP is not approved to apply on the Navajo Indian Reservation, and because the Navajo Nation did not have a federally applicable tribal implementation plan (TIP), EPA proposed to promulgate a FIP to remedy the existing regulatory gap. 64 FR 48725 (September 8, 1999). The proposed FIP would have, in essence, federalized the requirements applicable to NGS contained in the Arizona SIP. In explaining the basis for its proposed action, EPA stated that given the magnitude of emissions from the plant, the Agency believed the proposed FIP provisions were necessary and appropriate to ensure the protection of air quality on the Reservation. 64 FR at 48726.

EPA did not finalize the proposed 1999 FIP. Instead, EPA proposed a new FIP in September 2006. In the 2006 proposed FIP, EPA again explained that the Agency was proposing to remedy an existing regulatory gap with a source-specific FIP for NGS. EPA proposed to establish federally enforceable emission limits for NO<sub>x</sub> and PM based on the Arizona SIP limits,

to lower the opacity limit from 40% to 20% and to add control measures for dust.

## **II. Responses to Significant Comments:**

### **A. Concerns About Air Quality, Public Health and Other Environmental Media**

**Comment:** The majority of commenters stated that EPA should require NGS to install the most stringent or best available air pollution controls because the air quality in the Four Corners region is generally poor, visibility is deteriorating, and there are high rates of cancer, asthma and other respiratory and public health problems.

**Response:** EPA disagrees that we are required to impose more stringent emission limits for NGS than those contained in the FIP. EPA is exercising its discretion to close the regulatory gap that exists with respect to NGS. There is no approved implementation plan covering NGS or the Navajo Reservation, and in this action, EPA is not promulgating a reservation-wide FIP. EPA's exercise of authority in issuing this FIP is based on the Agency's conclusion that it is appropriate to protect air quality on the Reservation by remedying the lack of federally enforceable limits applicable to this facility. As such, our action is making enforceable those emissions limits NGS has historically followed.

In any event, NGS is located near Page, Arizona and not in the Four Corners area. Both areas are designated attainment for each of the NAAQS, including the secondary standard for PM<sub>2.5</sub> which was determined by the Administrator to be "requisite to protect the public welfare" from adverse visibility effects under section 109 of the CAA. In addition, visibility in the mandatory Class I areas near Page, Arizona and in the Fours Corners area is being separately addressed through EPA's nationally applicable Regional Haze Rule at 40 CFR 51.308-309. These two issues are discussed separately below.

## B. Concerns About Visibility and Mercury Emissions

**Comment:** Several commenters urged EPA to take regulatory action in addition to the proposed FIP to require reductions of NO<sub>x</sub>, PM and mercury emissions from NGS. In particular, several commenters urged EPA to undertake a determination of best available retrofit technology (BART) for NGS's NO<sub>x</sub> emissions. See 40 U.S.C. 7491(b)(2)(A). One commenter noted that NGS is the 8<sup>th</sup> largest NO<sub>x</sub> emitter in the U.S. and that the FIP was not addressing NO<sub>x</sub> or the environmental impact from the NO<sub>x</sub> emissions. The commenter also requested an explanation of when and at what levels BART limits would be applied to PM, mercury, VOC and other pollutants.

**Response:** EPA agrees that it may be necessary or appropriate in a future rulemaking to require NGS to reduce its NO<sub>x</sub> or PM emissions below those levels which were historically contained in the Arizona SIP (and are now contained in this FIP) or which are necessary to comply with the Acid Rain program. In the 1991 revision of the visibility FIP that created SO<sub>2</sub> emission limits for NGS, EPA concluded that those limits achieved greater reasonable progress than would BART, but did not address emissions of NO<sub>x</sub> or PM from NGS. Today's rule does not address the requirements of EPA's nationally applicable Regional Haze rule, codified at 40 CFR 51.308, which contains specific implementation plan requirements regarding BART determinations.<sup>1</sup> EPA recognizes, however, the importance of addressing emissions of NO<sub>x</sub> and PM from NGS for purposes of addressing NGS's contribution to visibility impairment. EPA has

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<sup>1</sup> Such implementation plans were not required from the States until December 17, 2007. Tribes are not subject to any mandatory deadlines to submit regional haze implementation plans. See 40 CFR 49.4; 64 FR at 35758 ("For example, unlike States, tribes are not required by the TAR to adopt and implement CAA plans or programs, thus tribes are not subject to mandatory deadlines for submittal of implementation plans."); see also *Arizona Public Service Company v. USEPA*, 562 F.3d at 1119).

requested and SRP has submitted an analysis of the NO<sub>x</sub> and PM control options to address BART. This document and supplemental submittals are available on the docket EPA has prepared for the BART rulemaking available at:

<http://www.regulations.gov/fdmspublic/component/main?main=DocketDetail&d=EPA-R09-OAR-2008-0454>

EPA is reviewing the information provided, and consulting with the Federal Land Manager(s) and States with Class I areas impacted by NGS, to determine the appropriate BART limits for NGS. On August 28, 2009, EPA issued an Advance Notice of Proposed Rulemaking (“ANPR”) concerning the anticipated visibility improvements and the cost effectiveness for different levels of air pollution controls as BART for NGS and for another coal-fired power plant located on the Navajo Nation, Four Corners Power Plant (“FCPP”). EPA issued the ANPR for the specific purpose of collecting additional information that EPA may consider in modeling the degree of anticipated visibility improvements in the Class I areas surrounding the two power plants and for determining whether BART controls are cost effective at this time. EPA also requested any additional information that commenters believe the agency should consider in promulgating a FIP establishing BART for the two power plants.

After considering the information received in response to the ANPR and other relevant information, EPA intends to publish separate FIPs proposing EPA’s BART determinations for FCPP and NGS under the Regional Haze rules. After evaluating all comments on the proposed BART determination for NGS, EPA will take final action regarding the BART requirements at NGS.

Although it is unlikely that VOC emitted from NGS will be regulated for visibility protection under the Regional Haze rules, comments concerning the contribution of volatile

organic compounds (VOCs) to visibility impairment are more appropriately considered during the regional haze rulemaking discussed above. Historically, VOC emissions from coal fired electric generating units (EGUs) have not been considered a significant contributor to visibility impairment, and EPA knows of no states in the West that are considering setting limits on coal-fired EGU VOC emissions for regional haze. In the West, the quantity of emissions of VOC from EGUs is relatively insignificant compared to the quantity of VOC emissions from biogenic sources, fires, or mobile sources.

EPA is not considering setting a BART limit for mercury as there is no evidence that mercury contributes to visibility impairment. On October 28, 2009, pursuant to CAA section 113(g), EPA published in the Federal Register for comment a proposed Consent Decree that would require the Agency to propose CAA section 112(d) standards to control hazardous air pollutants, including mercury, from coal- and oil-fired electric utility steam generating units by March 16, 2011, and issue final section 112(d) standards by November 16, 2011. EPA will request public comment on that rulemaking and will consider any significant comments on this issue that are raised during our section 112(d) rulemaking.

NGS is located near Page, Arizona, which is relatively distant from the Four Corners region. Nevertheless, EPA appreciates that the Four Corners region has been a center of energy development during the past several years. However, we also recognize that the area near Page, Arizona and the Four Corners region are currently designated as being attainment areas for all criteria air pollutants which EPA currently regulates under the CAA. Please see [http://www.epa.gov/region09/air/maps/maps\\_top.html](http://www.epa.gov/region09/air/maps/maps_top.html) for Region 9 air quality designations.

Section 108 of the CAA directs the Administrator to identify and list "air pollutants" that "in his judgment, may reasonably be anticipated to endanger public health and welfare" and

whose “presence . . . in the ambient air results from numerous or diverse mobile or stationary sources” and, if listed, to issue air quality criteria for them. These air quality criteria are intended to “accurately reflect the latest scientific knowledge useful in indicating the kind and extent of identifiable effects on public health or welfare which may be expected from the presence of [a] pollutant in ambient air. . .” Section 109, in turn, directs the Administrator to issue “primary” and “secondary” NAAQS for pollutants identified under section 109. The CAA defines a primary standard as one “the attainment and maintenance of which is the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.” A secondary standard must “specify a level of air quality the attainment and maintenance of which, in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of [the] pollutant in the ambient air.”

EPA’s NAAQS regulations further provide: “The promulgation of national primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of any State or Indian country.” (See 40 CFR 50.2(c)).

In setting a primary NAAQS, EPA takes into account the effects of an air pollutant on individuals who are particularly sensitive to the effects of pollution, such as children or those with respiratory problems. *See Lead Industries v. EPA*, 647 F.2d 1130, 1153 (D.C. Cir. 1980). EPA’s evaluation for setting the secondary standards, used to protect public welfare, includes the pollutant’s “effects on soils, water, vegetation, man-made materials, animals, wildlife, weather, visibility, climate, damage and deterioration to property, hazards to transportation, as well as effects on economic values and personal comfort and well-being.” 42 U.S.C. 7602(h).

### C. Concerns About Greenhouse Gas Emissions

**Comment:** Numerous commenters requested EPA to take action reducing greenhouse gases emissions from power plants.

**Response:** As many commenters may be aware, on April 2, 2007, the U.S. Supreme Court held that greenhouse gases fit within the definition of “air pollutant” under the Clean Air Act. Massachusetts v. EPA, 127 S.Ct. 1438 (2007). In response to the Supreme Court’s decision, on December 7, 2009, the Administrator of the U.S. EPA signed the final endangerment and cause or contribute findings for greenhouse gases under Section 202(a) of the Clean Air Act. Specifically, she found that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)—in the atmosphere threaten the public health and welfare of current and future generations. She also found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare. Note that these findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA’s proposed greenhouse gas emission standards for light-duty vehicles, which were proposed by EPA as part of a joint rulemaking with the Department of Transportation’s National Highway Safety Administration in September 2009. 74 FR 49454 (September 28, 2009).

In light of the light-duty vehicles rule, greenhouse gases will become “subject to regulation” for purposes of the Prevention of Significant Deterioration (PSD) and title V permit programs. Thus, in October 2009 EPA proposed a rule that would “tailor” the permit programs to limit which facilities would be required to obtain permits by initially focusing on large

facilities emitting over 25,000 tons of greenhouse gases a year. 74 FR 55292 (October 27, 2009).

Also, EPA recently finalized a rule that requires reporting of greenhouse gas emissions from large sources and suppliers in the United States. 74 FR 56260 (October 30, 2009). This rule will allow EPA to collect accurate and timely greenhouse gas emissions data to inform future policy decisions.

These actions show that EPA is moving forward in a careful and deliberate manner to fashion a reasonable and common-sense approach to address greenhouse gas emissions and climate change. EPA has and will continue to take a measured approach to address greenhouse gas emissions. Because EPA is continuing to develop its approach to addressing greenhouse gas emissions more broadly, and this FIP is narrow in scope, primarily developed to make enforceable those emissions levels that NGS has historically followed for traditional pollutants, this FIP is not the appropriate vehicle to address greenhouse gases. See, e.g., Ariz. Public Service Co. v. EPA, 562 F.3d 1116 (10th Cir. 2009) (EPA is not required to address all potential air quality issues in a FIP issued under 40 C.F.R. 49.11(a)). As discussed further in the preamble to the final rule, EPA is issuing this FIP under CAA sections 301(a) and 301(d)(4), and 40 CFR 49.11(a), and has determined this FIP to be an appropriate and important step in protecting air quality on the Reservation. Moreover, even assuming that EPA were required to address all potential requirements of the CAA in this FIP, there is no NAAQS for CO<sub>2</sub>, and under section 110 of the CAA, our FIP obligations are generally limited to pollutants for which the agency has established a NAAQS. While section 110 does address non-NAAQS pollutants through 110(a)(2)(C) and (J)'s requirement for plans to meet the requirements of the PSD and visibility programs, NGS is covered by the federal PSD program (*see* 40 CFR 52.144) that will cover

greenhouse gases when such pollutants become "regulated air pollutants." We are not aware of any evidence that ambient concentrations of greenhouse gases are themselves direct contributors to significant visibility in any Class I areas. Thus, we do not believe it would be appropriate to address GHGs in this FIP.

#### D. Comments About Desert Rock Power Plant

**Comment:** Some commenters objected to construction of the Desert Rock power plant.

**Response:** EPA notes that the scope of this rulemaking is promulgation of the source-specific FIP for NGS.

Although NGS is not located near the site of the proposed Desert Rock Energy Facility, EPA is aware of the impacts that are projected to occur if Desert Rock Energy Facility is constructed and begins operation. That facility is subject to PSD permitting requirements, which ensure that permitted facilities install and operate Best Available Control Technologies (BACT) and that their emissions will not cause a violation of any NAAQS or applicable increment. EPA received approximately 1000 comments on the proposed PSD permit for the Desert Rock Energy Facility, most of which raised concerns with air quality in the Four Corners area. EPA responded to those comments as part of its PSD permitting process, and those responses are available for public review. EPA will be reconsidering elements of the permit after a remand of the permit by the EPA Environmental Appeals Board. For further information on the PSD permitting process for the Desert Rock Energy Facility, see <http://www.epa.gov/region09/air/permit/desertrock/>.

#### E. Concerns About Public Health

**Comment:** Some comments requested EPA to conduct a health study and stated that rates for cancer, asthma and other public health problems were worse in the Four Corners region

than elsewhere.

**Response:** NGS is not located in the Four Corners region. In any event and as discussed more fully above, EPA regularly evaluates public health in the context of promulgating nationally applicable standards such as the NAAQS.

F. Comments on the Scope of the FIP

**Comment:** The majority of commenters objecting to both the FCPP and NGS FIPs indicated that EPA should go beyond merely federalizing the emission limits which NGS has historically followed. Other commenters urged EPA to take regulatory action to regulate or to further reduce emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM, mercury, and “toxic emissions.” Commenters raised a variety of general concerns regarding impacts associated with coal fired power plants such as NGS, including public health and/or environmental impacts of fugitive dust from coal mining, mercury (Hg) and carbon dioxide (CO<sub>2</sub>, greenhouse gases). Another commenter argued that in issuing a FIP for NGS, EPA must comply not only with all of the requirements of section 301 of the CAA but also ensure through the FIP process that NGS is in compliance with all applicable federal and state ambient standards by complying with the requirements of section 110 of the CAA addressing State implementation plans.

**Response:** As stated above, EPA’s authority to promulgate this source-specific FIP is based on CAA sections 301(a) and (d)(4) and the regulations implementing these provisions at 40 CFR Part 49. Today’s action is not based on the requirements of CAA section 110. CAA section 301(d)(4) provides EPA with broad discretion to promulgate regulations directly for sources located in Indian country. The Tribal Authority Rule provides EPA with “discretion to determine what rulemaking is necessary or appropriate to protect air quality in Indian country. *Arizona Public Service Company v. USEPA*, 562 F.3d 1116, 1125 (10<sup>th</sup> Cir. 2009)(upholding

EPA's interpretation of its discretionary authority in the context of a source-specific FIP for the Four Corners Power Plant).

EPA is exercising its discretion to promulgate emission limitations for NGS to close the regulatory gap that exists with respect to NGS. As explained above, at present there is no approved implementation plan covering NGS because the Arizona SIP does not apply to sources located on the Navajo Indian Reservation and the Navajo Nation has not promulgated an applicable Tribal Implementation Plan. EPA's exercise of authority in issuing this FIP is based on the Agency's conclusion that it is appropriate to protect air quality on the Reservation by remedying the lack of federally enforceable limits applicable to NGS. As such, our action is largely limited to making enforceable those emissions limits which NGS has historically followed and re-codifying the limitations applicable to NGS in the visibility FIP for Arizona. We have also finalized our proposal to lower the opacity limit and to add certain material handling measures to provide additional benefits to air quality and visibility, and to conform to revisions that have been approved into the Arizona SIP. Today's action is an important step in protecting air quality on the Reservation. As noted in the proposal, this action will contribute towards ensuring continued maintenance of the NAAQS and towards protecting visibility. EPA acknowledges that additional regulatory actions by EPA may be necessary or appropriate in the future to further protect air quality on the Navajo Reservation, depending on, among other things, conditions on the Reservation and the decisions of the Navajo Nation to implement air quality programs. Our detailed response to comments on mercury, CO<sub>2</sub> and other emissions is discussed further below and in our Response to Comments document:

G. Comments on the Preamble to the Proposed Rule

**Comment:** SRP submitted several clarification comments on the language in the

preamble to the proposed rule. Clarifications included corrections to our description of NGS' ownership, pollutant emissions, the particulate matter limit, SRP's previous method of compliance determination for SO<sub>2</sub> emissions, and discussion of coal sulfur content.

**Response:** Although EPA agrees with SRP's clarification comments on the preamble to the proposed rule, these comments do not affect the language in the final rule. Although we are not making any changes to the FIP's regulatory language as a result of these comments, we have made changes, where appropriate, in the preamble to this final action to reflect these clarifying comments.

#### H. Comments on Emissions Limits

**Comment:** Several commenters urged EPA to take regulatory action in addition to the proposed FIP to require reductions of NO<sub>x</sub> and PM emissions from NGS. In particular, several commenters urged EPA to undertake a determination of best available retrofit technology (BART) for NGS's NO<sub>x</sub> emissions. *See* 40 U.S.C. 7491(b)(2)(A). One commenter noted that NGS is the 8<sup>th</sup> largest NO<sub>x</sub> emitter in the U.S. and that the FIP was not addressing NO<sub>x</sub> or the environmental impact from the NO<sub>x</sub> emissions. The commenter also requested an explanation of when and at what levels BART limits would be applied to PM, mercury, VOC and other pollutants.

**Response:** As noted in detail above, EPA agrees that it may be necessary or appropriate in a future rulemaking to require NGS to reduce its NO<sub>x</sub> or PM emissions below those levels which were historically contained in the Arizona SIP (and are now contained in this FIP) or which are necessary to comply with the Acid Rain program. EPA recognizes, however, the importance of addressing emissions of NO<sub>x</sub> and PM from NGS for purposes of addressing

NGS's contribution to visibility impairment. For further information, see the previous response to comments on visibility impairment.

Although it is unlikely that VOC emitted from NGS will be regulated for visibility protection under the Regional Haze rules, comments concerning the contribution of VOCs to visibility impairment are more appropriately considered during the regional haze rulemaking discussed above. Historically VOC emissions from coal fired electric generating units (EGUs) have not been considered a significant contributor to visibility impairment, and EPA knows of no states in the West that are considering setting limits on coal-fired EGU VOC emissions for regional haze. In the West, the quantity of emissions of VOC from EGUs is relatively insignificant compared to the quantity of VOC emissions from biogenic sources, fires, or mobile sources.

EPA is not considering setting a BART limit for mercury as there is no evidence that mercury contributes to visibility impairment. On October 28, 2009, pursuant to CAA section 113(g), EPA published in the Federal Register for comment a proposed Consent Decree that would require the Agency to propose CAA section 112(d) standards to control hazardous air pollutants, including mercury, from coal- and oil-fired electric utility steam generating units by March 16, 2011, and issue final section 112(d) standards by November 16, 2011. EPA will request public comment on that rulemaking and will consider any significant comments on this issue that are raised during our section 112(d) rulemaking.

**Comment:** SRP requested that the particulate matter limit in the proposed rule be revised for better clarity. The requested changes included that compliance would be determined from at least three test runs over a 60 minute duration at each stack.

**Response:** EPA agrees with SRP's proposed changes to the particulate matter limit and

has made the appropriate revisions in the final rule which include specifying at least three 60 minute sampling runs for each stack. This also changes the averaging time for the particulate matter limit from the proposed 6 hour average to a three hour average based on three runs lasting approximately one hour each. This is not a significant change from the proposal and results in increasing the enforceability of the limit.

**Comment:** One commenter noted inconsistencies with NGS's excess opacity reporting to the Arizona Division of Environmental Quality (ADEQ) and to the Navajo EPA. The commenter noted that the excess opacity reporting to the Navajo EPA was based on 40% and not the proposed 20%, while reporting to ADEQ was based on 20% opacity.

**Response:** The commenter's observation is correct that past reports to the Navajo EPA were based on 40% opacity exceedances. This FIP proposed and is finalizing a 20% opacity limit. By making NGS subject to a 20% opacity limit, the units will be operated in a manner consistent with the change that was recently made to the Arizona SIP to require 20 % opacity. The 20% opacity standard is more stringent (i.e., environmentally beneficial) than 40%.

**Comment:** One commenter noted that the language in the opacity provision should be clarified to "condensed uncombined water." The commenter also suggested that the word "normal" be dropped from the phrase "normal six (6) minute period." In addition, the commenter thought that the exemption allowing 40% opacity for "scrubber transition periods" was subjective and allows NGS to define these periods.

**Response:** EPA agrees with the first part of the comment. EPA has changed the language from the proposed, "excluding condensed water vapor", to the suggested "condensed uncombined water", and has also added the word "droplets" after "condensed uncombined water," as EPA believes the term "condensed uncombined water droplets" is more accurate.

EPA notes that adding the word “droplets” to this language is consistent with the use of the word in the analogous opacity provision in the FCPP FIP. EPA also agrees with the second part of the comment; EPA believes that that the word “normal” is ambiguous and unnecessary and has deleted it from the provision.

However, EPA does not agree with the third part of the comment referring to the scrubber transition periods. One purpose for monitoring opacity is to ensure the particulate matter standard is being met on a continuous basis without requiring installation of a PM CEMS. However, for the particular PM emissions control system at NGS (Electrostatic Precipitators followed by SO<sub>2</sub> scrubbers), there are periods of opacity that cannot be necessarily correlated to improper operation of the control system. EPA has added to the definition of "scrubber transition period" language that further defines it as a period when the scrubber module is not in use. This is a very well defined period and is easily identified by the high readings of the SO<sub>2</sub> CEMs. NGS has found that during the very infrequent occasions when a scrubber module is out of service and the unit is operating (i.e., the scrubber transition period), the hot flue gas (normally cooled by the scrubber) collects salts that have accumulated in the stack over extended periods of wet stack conditions. This has led to increased opacity even when the Electrostatic Precipitators (ESPs) upstream of the scrubbers are operating normally and properly controlling PM emissions. This potential excess opacity is not the result of poor performance of the particulate matter control device, but is due to the inevitable minor carryover of droplets from the scrubber which deposit on the stacks.

#### I. Comments on Control Requirements

**Comment:** SRP requested the startup termination limit for NGS be increased from 300 to 400 MW to maintain consistency with the startup termination limit for FCPP.

**Response:** Other than noting that EPA allowed a startup termination limit of 400 MW for FCPP, SRP has not provided an explanation as to why a startup termination limit of 400 MW is more appropriate for NGS than 300 MW. The critical factor in the startup is that the hot side ESP reaches 400° so that it may be expected to operate properly. This temperature can be reached when the NGS units reach 300 MW. To allow the startup to extend beyond this operating level simply because EPA agreed to it for FCPP, which has completely different control technology with different operational limitations, is not reasonable. Given that the control technology at NGS is different from the control technology at FCPP, and that NGS provided no technical justification for making the change from 300 MW to 400 MW, EPA maintains the 300 MW startup termination limit for NGS along with the proposed 400° precipitator temperature.

**Comment:** SRP requested a change to the shutdown definition, because they claimed that the first sentence, which referred to cessation of coal burning, was incorrect.

**Response:** EPA agrees with this comment and dropped the first sentence of the definition referring to cessation of coal burning, since coal may still be combusted when a unit load reaches 300 MW or less and the intention is to remove the unit from service. This is not a significant change from the proposal.

**Comment:** SRP requested that NGS be exempt from opacity monitoring requirements, consistent with 40 CFR 75.14(b) which exempts units equipped with a wet flue pollution control system for SO<sub>2</sub> or particulates from the monitoring requirements of Part 75, if the source “can demonstrate that condensed water is present in the exhaust flue gas stream and would impede the accuracy of opacity measurements.”

**Response:** EPA agrees with SRP’s comments that when the stack is saturated and has uncombined water droplets, the Continuous Opacity Monitoring Systems (COMs) cannot

correctly read the opacity due to particulate matter and has updated the final rule to reflect this change; however, NGS will continue to have a requirement to operate COMs on each stack. NGS is required to report those time periods when saturated stack conditions impact the opacity monitoring. EPA believes that it is reasonable to continue to require the COMs since there are times that NGS is allowed to bypass the scrubbers under the visibility FIP, and continued operation of the COMs will allow assessment of opacity and proper operation of the particulate matter controls during these periods.

**Comment:** SRP requested that a new section be added to the NGS FIP to address the method to be used to demonstrate compliance with the 20 percent opacity limit for dust related activities.

**Response:** EPA agrees with SRP's comments that the rule should cite the appropriate EPA reference method and with SRP's proposed addition to the NGS FIP for this purpose. EPA has added this new requirement to the final rule at 40 CFR 49.24(e)(8), and has also added a reference to EPA Reference Method 9 at 40 CFR 49.24(d)(3). This is not a significant change from the proposal and increases enforceability.

**Comment:** SRP commented that because SRP is already operating CEMS for nitrogen oxides (NO<sub>x</sub>) and SO<sub>2</sub> and COMs on Units 1, 2, and 3, the requirement to maintain and operate these systems sixty days after promulgation of the rule is unnecessary. SRP also commented that because this equipment has already been certified, it does not need to be re-certified.

**Response:** EPA agrees with these comments and notes that the requirements in 40 CFR Part 75 govern operation and maintenance of the CEMS and COMs equipment at NGS. EPA has removed the requirements for the equipment to be maintained and operated sixty days after the promulgation of the rule and the certification requirement. This is not a significant change from

the proposal because NGS must continue to operate its CEM and COMs pursuant to the requirements of 40 CFR Part 75.

**Comment:** SRP requested that the final FIP for NGS only require the use of the Quality Assurance procedures in 40 CFR Part 75.

**Response:** In the proposal, EPA added quality assurance provisions in addition to the quality assurance procedures in Part 75. EPA believes that these procedures and performance specifications are needed for very low emitting SO<sub>2</sub> sources such as NGS where the monitor is used for determining compliance. However, EPA has determined that the 1991 visibility FIP already requires the use of CEMs for SO<sub>2</sub> compliance determinations and requires 40 CFR Part 60 Appendix F quality assurance (See 40 CFR 52.145(d)(4)(1991)) for these CEMs. Further, the Quality Assurance procedures in 40 CFR Part 75 are also already applicable to the facility. Therefore, this final rule has been modified from the proposal to delete these quality assurance provisions.

**Comment:** SRP requested several revisions to the language in the rule regarding emissions tests for auxiliary boilers to better accommodate the limited use of these boilers. SRP requested that the testing be required if the unit operated more than 720 hours in any calendar year as opposed to the proposed requirement to test after a cumulative 720 hours of operation.

**Response:** Due to the limited use of these boilers at NGS, EPA agrees with SRP's comments and has updated the final rule to incorporate SRP's requested changes. In addition, the final rule states that EPA has the authority to require testing at any time EPA believes it is necessary. This is not a significant change from the proposal and increases enforceability of the rule.