§ 49.5513 Federal Implementation Plan Provisions for Navajo Generating Station, Navajo Nation.

Commented [LA1]: Discussion topics for NN/SRP/EPA call (see also yellow highlighted sections)
- Alternative limits or work practice standards for SU/SD
- MATS compliance and FIP consistency with MATS
- Opacity/COMS
- Moving 1991 FIP provisions from 40 CFR 52.145 to Part 49 or other options.

(a) Applicability. The provisions of this section shall apply to each owner or operator of the fossil fuel-fired, steam-generating equipment designated as Units 1, 2, and 3, equipment associated with coal and ash handling, and the two auxiliary steam boilers at the Navajo Generating Station (NGS) on the Navajo Nation located in the Northern Arizona Intrastate Air Quality Control Region (See *40 CFR 81.270*).

(b) Compliance Dates. Compliance with the requirements of this section is required upon the effective date of this section unless otherwise indicated by compliance dates contained in specific provisions.

(c) Definitions. For the purposes of this section:

(1) Absorber upset transition period means the 24-hour period following an upset of an SO_2 absorber module which resulted in the absorber being taken out of service.

(2) Excess emissions means the emissions of air contaminants in excess of an applicable emissions limitation or requirement. ~~Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding. This rule provides an affirmative defense to actions for penalties brought for excess emissions that arise during certain malfunction episodes.~~

(3) Malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions. ~~An affirmative defense is not available if during the period of excess emissions, there was an exceedance of the relevant ambient air quality standard that could be attributed to the emitting source.~~

(4) Owner or Operator means any person who owns, leases, operates, controls or supervises the NGS, any of the fossil fuel-fired, steam-generating equipment at the NGS, or the auxiliary steam boilers at the NGS.

(5) Plant-wide means a weighted average of particulate matter and SO_2 emissions for Units 1, 2, and 3 based on the heat input to each unit as determined by 40 CFR part 75.

(6) Point source means any crusher, any conveyor belt transfer point, any pneumatic material transferring, any baghouse or other control devices used to capture dust emissions from loading and unloading, and any other stationary point of dust that may be observed in conformance with Method 9 of Appendix A-4 of 40 CFR Part 60 (excluding stockpiles).

(7) Regional Administrator means the Regional Administrator of the Environmental Protection Agency Region 9 or his/her authorized representative.

(8) Startup shall mean the period from start of fires in the boiler with fuel oil, to the time when the electrostatic precipitator is sufficiently heated such that the temperature of the air preheater inlet reaches 400 degrees Fahrenheit and when a unit reaches 300 MW net load. Proper startup procedures

shall include energizing the electrostatic precipitator prior to the combustion of coal in the boiler. ~~This rule provides an affirmative defense to actions for penalties brought for excess emissions that arise during startup episodes. An affirmative defense is not available if during the period of excess emissions, there was an exceedance of the relevant ambient air quality standard that could be attributed to the emitting source.~~

(9) Shutdown shall begin when the unit drops below 300 MW net load with the intent to remove the unit from service. The precipitator shall be maintained in service until boiler fans are disengaged. ~~This rule provides an affirmative defense to actions for penalties brought for excess emissions that arise during shutdown episodes. An affirmative defense is not available if during the period of excess emissions, there was an exceedance of the relevant ambient air quality standard that could be attributed to the emitting source.~~

(10) Oxides of nitrogen (NO_x) means the sum of nitrogen oxide (NO) and nitrogen dioxide (NO_2) in the flue gas, expressed as nitrogen dioxide.

(d) Emissions Limitations and Control Measures. The following emission limits shall apply at all times, unless otherwise noted.

(1) Sulfur Oxides. No owner or operator shall discharge or cause the discharge of sulfur oxides into the atmosphere from Units 1, 2, or 3 in excess of 1.0 pound per million British thermal units (lb/MMBtu) averaged over any three (3) hour period, on a plant-wide basis.

(2) Particulate Matter. No owner or operator shall discharge or cause the discharge of particulate matter into the atmosphere in excess of 0.060 lb/MMBtu, on a plant-wide basis, as averaged from at least three sampling runs per stack, each at a minimum of 60 minutes in duration, each collecting a minimum sample of 30 dry standard cubic feet.

(3) Dust. Each owner or operator shall operate and maintain the existing dust suppression methods for controlling dust from the coal handling and storage facilities. ~~Within ninety (90) days after promulgation of these regulations the owner or operator shall submit to the Regional Administrator a description of the dust suppression methods for controlling dust from the coal handling and storage facilities, fly ash handling and storage, and road sweeping activities.~~ Each owner or operator shall not emit dust with an opacity greater than 20% from any crusher, grinding mill, screening operation, belt conveyor, truck loading or unloading operation, or railcar unloading station, as determined using 40 CFR Part 60, Appendix A-4 Method 9.

(4) Opacity. No owner or operator shall discharge or cause the discharge of emissions from the stacks of Units 1, 2, or 3 into the atmosphere exhibiting greater than 20% opacity, excluding condensed uncombined water droplets, averaged over any six (6) minute period and 40% opacity, averaged over six (6) minutes, during absorber upset transition periods.

(e) Testing and Monitoring.

(1) On and after the effective date of this regulation, the owner or operator shall maintain and operate Continuous Emissions Monitoring Systems (CEMS) for NOx and SO_2 and Continuous Opacity Monitoring Systems (COMS) on Units 1, 2, and 3 in accordance with *40 CFR 60.8* and *60.13(e)*, (f), and (h), and Appendix B of Part 60. The owner or operator shall comply with the quality assurance procedures for CEMS and COMS found in 40 CFR part 75.

(2) The owner or operator shall conduct annual mass emissions tests for particulate matter on Units 1, 2, and 3, operating at rated capacity, using coal that is representative of that normally used. The tests shall be conducted using the appropriate test methods in 40 CFR Part 60, Appendix A.

(3) During any calendar year in which an auxiliary boiler is operated for 720 hours or more, and at other times as requested by the Administrator, the owner or operator shall conduct mass emissions tests for sulfur dioxide, nitrogen oxides and particulate matter on the auxiliary steam boilers, operating at rated capacity, using oil that is representative of that normally used. The tests shall be conducted using the appropriate test methods in 40 CFR Part 60, Appendix A. For particulate matter, testing shall consist of three test runs. Each test run shall be at least sixty (60) minutes in duration and shall collect a minimum volume of thirty (30) dry standard cubic feet.

(4) The owner or operator shall maintain two sets of opacity filters for each type of COMS, one set to be used as calibration standards and one set to be used as audit standards. At least one set of filters shall be on site at all times.

(5) All emissions testing and monitor evaluation required pursuant to this section shall be conducted in accordance with the appropriate method found in 40 CFR Part 60, Appendices A and B.

(6) The owner or operator shall install, maintain and operate ambient monitors at Glen Canyon Dam for particulate matter ($PM_{2.5}$ and PM_{10}), nitrogen dioxide, sulfur dioxide, and ozone. Operation, calibration and maintenance of the monitors shall be performed in accordance with 40 CFR Part 58, manufacturer's specification, and "Quality Assurance Handbook for Air Pollution Measurements Systems", Volume II, U.S. EPA as applicable to single station monitors. Data obtained from the monitors shall be reported annually to the Regional Administrator. All particulate matter samplers shall operate at least once every six days, coinciding with the national particulate sampling schedule.

(7) Nothing herein shall limit EPA's ability to ask for a test at any time under section 114 of the Clean Air Act, *42 U.S.C. 7413,* and enforce against any violation of the Clean Air Act or this section.

(8) A certified EPA Reference Method 9 of Appendix A-4 of 40 CFR Part 60 observer shall conduct a weekly visible emission observation for the equipment and activities described under Section 49.24(d)(3). If visible emissions are present at any of the equipment and/or activities, a 6-minute EPA Reference Method 9 observation shall be conducted. The name of the observer, date, and time of observation, results of the observations, and any corrective actions taken shall be noted in a log.

(f) Reporting and Recordkeeping Requirements. Unless otherwise stated all requests, reports, submittals, notifications and other communications to the Regional Administrator required by this section shall be submitted to the Director, Navajo Environmental Protection Agency, P.O. Box 339, Window Rock, Arizona 86515, (928) 871 -7692, (928) 871-7996 (facsimile), and to the Director, ~~Air Enforcement~~ Division, U.S. Environmental Protection Agency, Region IX, to the attention of Mail Code: ENF-2-1~~AIR-5~~, at 75 Hawthorne Street, San Francisco, California 94105, (415) 972-39~~8~~290, (415) 947-3579 (facsimile), or by email at r9.aeo@epa.gov. For each unit subject to the emissions limitations in this section the owner or operator shall:

(1) Comply with the notification and recordkeeping requirements for testing found in *40 CFR 60.7*. All data/reports of testing results shall be submitted to the Regional Administrator and postmarked within 60 days of testing.

(2) For excess emissions, notify the ~~Navajo Environmental Protection Agency Director and the U.S. Environmental Protection Agency~~ Regional Administrator by telephone or in writing within one

business day. ~~This notification should be sent to the Director, Navajo Environmental Protection Agency, by mail to P.O. Box 339, Window Rock, Arizona 86515, or by facsimile to: (928) 871-7996 (facsimile), and to the Regional Administrator, U.S. Environmental Protection Agency Region 9, by mail to the attention of Mail Code: AIR-5, at 75 Hawthorne Street, San Francisco, California 94105, by facsimile to: (415) 947-3579 (facsimile), or by e-mail to:~~

~~*r9.aco@epa.gov*.~~ A complete written report of the incident shall be submitted to the Regional Administrator within ten (10) working days after the event. This notification shall include the following information:

(i) The identity of the stack and/or other emissions points where excess emissions occurred;

(ii) The magnitude of the excess emissions expressed in the units of the applicable emissions limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

(iii) The time and duration or expected duration of the excess emissions;

(iv) The identity of the equipment causing the excess emissions;

(v) The nature and cause of such excess emissions;

(vi) If the excess emissions were the result of a malfunction, the steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; and

(vii) The steps that were taken or are being taken to limit excess emissions.

(3) Notify the Regional Administrator verbally within one business day of determination that an exceedance of the NAAQS has been measured by a monitor operated in accordance with this regulation. The notification to the Regional Administrator shall include the time, date, and location of the exceedance, and the pollutant and concentration of the exceedance. Compliance with this paragraph (f)(3)(v) shall not excuse or otherwise constitute a defense to any violations of this section or of any law or regulation which such excess emissions or malfunction may cause. The verbal notification shall be followed within fifteen (15) days by a letter containing the following information:

(i) The time, date, and location of the exceedance;

(ii) The pollutant and concentration of the exceedance;

(iii) The meteorological conditions existing 24 hours prior to and during the exceedance;

(iv) For a particulate matter exceedance, the 6-minute average opacity monitoring data greater than 20% for the 24 hours prior to and during the exceedance; and

(v) Proposed plant changes such as operation or maintenance, if any, to prevent future exceedances.

(4) Submit quarterly excess emissions reports for sulfur dioxide and opacity as recorded by CEMS and COMS together with a CEMS data assessment report to the Regional Administrator no later than 30 days after each calendar quarter. The owner or operator shall complete the excess emissions reports according to the procedures in *40 CFR 60.7(c)* and (d) and include the Cylinder Gas Audit. Excess opacity due to condensed water vapor in the stack does not constitute a reportable exceedance; however, the length of time during which water vapor interfered with COMs readings should be summarized in the *40 CFR 60.7 (c)* report.

(g) Compliance Certifications. Notwithstanding any other provision in this implementation plan, the owner or operator may use any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, for the purpose of submitting compliance certifications.

(h) Equipment Operations. The owner or operator shall operate all equipment or systems needed to comply with this section in accordance with *40 CFR 60.11(d)* and consistent with good engineering practices to keep emissions at or below the emissions limitations in this section, and following outages of any control equipment or systems the control equipment or system will be returned to full operation as expeditiously as practicable.

(i) Enforcement.

(1) Notwithstanding any other provision in this implementation plan, any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not a person has violated or is in violation of any standard in the plan.

(2) [reserved] ~~**During periods of start-up and shutdown the otherwise applicable emission limits or requirements for opacity and particulate matter shall not apply provided that:**~~

~~(i)At all times the facility is operated in a manner consistent with good practice for minimizing emissions, and the owner or operator uses best efforts regarding planning, design, and operating procedures to meet the otherwise applicable emission limit;~~

~~(ii)The frequency and duration of operation in start-up or shutdown mode are minimized to the maximum extent practicable; and~~

~~(iii)The owner or operator's actions during start-up and shutdown periods are documented by properly signed, contemporaneous operating logs, or other relevant evidence.~~

(3) Emissions in excess of the level of the applicable emission limit or requirement that occur due to a malfunction shall constitute a violation of the applicable emission limit. ~~However, it shall be an affirmative defense in an enforcement action seeking penalties if the owner or operator has met with all of the following conditions:~~

~~(i)The malfunction was the result of a sudden and unavoidable failure of process or air pollution control equipment and did not result from inadequate design or construction of the process or air pollution control equipment;~~

~~(ii)The malfunction did not result from operator error or neglect, or from improper operation or maintenance procedures;~~

~~(iii)The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;~~

~~(iv)Steps were immediately taken to correct conditions leading to the malfunction, and the amount and duration of the excess emissions caused by the malfunction were minimized to the maximum extent practicable;~~

~~(v)All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;~~

~~(vi)All emissions monitoring systems were kept in operation if at all possible; and~~

~~(vii)The owner or operator's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.~~

(j)

(1) Applicability. Regional Haze Best Available Retrofit Technology limits for NO_X for this plant are in addition to the requirements of paragraphs (a) through (i) of this section. The provisions of this paragraph (j) are severable, and if any provision of this paragraph (j), or the application of any provision of this paragraph (j) to any owner/operator or circumstance, is held invalid, the application of such provision to other owner/operators and other circumstances, and the remainder of this paragraph (j), will not be affected thereby. Nothing in this paragraph (j) allows or authorizes any Unit to emit NO_X at a rate that exceeds its existing emission limit of 0.24 lb/MMBtu as established by EPA permit AZ 08-01 issued on November 20, 2008.

(2) Definitions. Terms not defined below have the meaning given to them in the Clean Air Act or EPA's regulations implementing the Clean Air Act and in paragraph (c) of this section. For purposes of this paragraph (j):

(i) 2009-2029 NO_X Cap means a limit on emissions from Units 1, 2, and 3 of no more than 416,865 tons of NO_X.

(ii) 2009-2044 NOx Cap means a limit on emissions from Units 1, 2, and 3 of no more than 494,899 tons of NO_X.

(iii) Boiler operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period.

(iv) Coal-fired unit means any of Units 1, 2, or 3 at Navajo Generating Station.

(v) Continuous Emission Monitoring System or CEMS means the equipment required by 40 CFR part 75 and this paragraph (j).

(vi) Departing Participant means either Los Angeles Department of Water and Power or Nevada Energy, also known as NV Energy or Nevada Power Company.

(vii) Emission limitation or emission limit means the federal emissions limitation required by this paragraph.

(viii) Existing Participant means the existing owners of NGS: Los Angeles Department of Water and Power; Nevada Energy, also known as NV Energy or Nevada Power Company; Salt River Project Agricultural Improvement and Power District; Arizona Public Service Company; and Tucson Electric Company, together with the United States, acting through the Bureau of Reclamation.

(ix) lb means pound(s).

(x) Low-NO_X Burners and Separated Over-Fire Air or LNB/SOFA means combustion controls installed on each Unit between 2009 and 2011.

(xi) Navajo Nation means the Navajo Nation, a federally recognized Indian Tribe.

(xii) NGS or Navajo Generating Station means the steam electric generating station located on the Navajo Reservation near Page, Arizona, consisting of Units 1, 2, and 3, each 750 MW

(nameplate rating), the switchyard facilities, and all facilities and structures used or related thereto.

(xiii) NO_X means nitrogen oxides expressed as nitrogen dioxide (NO_2).

(xiv) Owner/operator means any person(s) who own(s) or who operate(s), control(s), or supervise(s) one more of the Units of the Navajo Generating Station.

(xv) MMBtu means million British thermal unit(s).

(xvi) Operating hour means any hour that fossil fuel is fired in the unit.

(xvii) Unit means any of Units 1, 2, or 3 at Navajo Generating Station.

(xviii) Valid data means CEMs data that is not out of control as defined in 40 CFR part 75.

(3) "Better than BART" alternative for NO_x. Total cumulative NO_X emissions from Units 1, 2, and 3, from January 1, 2009 to December 31, 2044, may not exceed the 2009-2044 NO_X Cap. The owner/operator must implement the applicable operating scenario, under paragraph (j)(3)(i) of this section, to ensure NO_X emission reductions sufficient to maintain total cumulative NO_X emissions from Units 1, 2, and 3 below the 2009-2044 NO_X Cap.

(i) Operating scenarios to comply with 2009-2044 NO_x Cap. The owner/operator must comply with one of the following operating scenarios based on the applicability provisions in paragraph (j)(3)(ii) of this section.

(A) Alternative A1.

(1) By December 31, 2019, the owner/operator must permanently cease operation of one coal-fired Unit; and

(2) By December 31, 2030, the owner/operator must comply with a NO_X emission limit of 0.07 lb/MMBtu, based on a rolling average of 30 boiler operating days, on each of the two remaining coal-fired Units.

(3) The owner/operator must permanently cease operation of Units 1, 2, and 3 if total cumulative emissions of NO_X from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii) of this section, exceed the 2009-2044 NO_X Cap at any time prior to December 31, 2044.

(B) Alternative A2.

(1) By December 31, 2019, the owner/operator must permanently cease operation of one coal-fired Unit; and

(2) By December 31, 2019, the owner/operator may increase net generating capacity of the remaining two coal-fired Units by a combined total of no more than 189 MW. The actual increase in net generating capacity shall be limited by the sum of 19 MW and the ownership interest, in net MW capacity, purchased by the Navajo Nation by December 31, 2019. Nothing in paragraph (j) of this section alters any regulatory requirements, including those for pre-construction permitting, associated with any increase in the net generating capacity of the Unit(s).

(3) By December 31, 2030, the owner/operator must comply with a NOx emission limit of 0.07 lb/MMBtu, based on a rolling average of 30 boiler operating days, on each of the two remaining coal-fired Units.

(4) The owner/operator must permanently cease operation of Units 1, 2, and 3 if total cumulative emissions of NOx from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii) of this section, exceed the 2009-2044 NOx Cap at any time prior to December 31, 2044.

(C) Alternative A3.

(1) By December 31, 2019, the owner/operator must reduce the net generating capacity of NGS by no less than 561 MW. The actual reduction in net generating capacity of NGS shall be determined by the difference between 731 MW and the ownership interest, in net MW capacity and limited to 170 MW, purchased by the Navajo Nation by December 31, 2019.

(2) By December 31, 2030, the owner/operator must comply with a NOx emission limit of 0.07 lb/MMBtu, based on a rolling average of 30 boiler operating days, on two Units.

(3) The owner/operator must permanently cease operation of Units 1, 2, and 3 if total cumulative emissions of NOx from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii) of this section, exceed the 2009-2044 NOx Cap at any time prior to December 31, 2044.

(D) Alternative B.

(1) Total cumulative NOx emissions from Units 1, 2, and 3 may not exceed the 2009-2044 NOx Cap or the 2009-2029 NOx Cap.

(2) The owner/operator must cease operation of Units 1, 2, and 3 if total cumulative emissions of NOx from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii) of this section, exceed the 2009-2029 NOx Cap at any time prior to December 31, 2029. The owner/operator may restart operation of Units 1, 2, and 3 after January 1, 2030, as long as total cumulative emissions of NOx from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii) of this section, do not exceed the 2009-2044 NOx Cap.

(3) The owner/operator must permanently cease operation of Units 1, 2, and 3 if total cumulative emissions of NOx from Units 1, 2, and 3, based on annual reports required under paragraph (j)(4)(ii)), exceed the 2009-2044 NOx Cap at any time prior to December 31, 2044.

(ii) Applicability of alternatives. (A) Alternative A1 applies if by December 31, 2019, one of the following occurs:

(1) Both of the Departing Participants retire their ownership interests in NGS by December 31, 2019, and the Navajo Nation does not purchase an ownership interest in NGS; or

(2) Both of the Departing Participants sell their ownership interests in NGS to Existing Participants, and the Navajo Nation does not purchase an ownership interest in NGS; or

(3) One of the Departing Participants retires its ownership interest in NGS and the other Departing Participant sells its ownership interest in NGS to an Existing Participant, and the Navajo Nation does not purchase an ownership interest in NGS.

(B) Alternative A2 applies if by December 31, 2019, one of the following occurs:

(1) Both of the Departing Participants sell their ownership interests in NGS to Existing Participants, the Navajo Nation has purchased an ownership interest in NGS, and the owner/operator has increased net generating capacity of the two remaining Units by a combined total of no more than 189 MW; or

(2) One of the Departing Participants retires its ownership interest in NGS and the other Departing Participant sells its ownership interest in NGS to an Existing Participant, the Navajo Nation has purchased an ownership interest in NGS, and the owner/operator has increased net generating capacity of the two remaining Units by a combined total of no more than 189 MW.

(C) Alternative A3 applies if by December 31, 2019, one of the following occurs:

(1) Both of the Departing Participants sell their ownership interests in NGS to Existing Participants, the Navajo Nation has purchased an ownership interest in NGS, and the owner/operator has not increased net generating capacity of the Units at NGS; or

(2) One of the Departing Participants retires its ownership interest in NGS and the other Departing Participant sells its ownership interest in NGS to an Existing Participant, the Navajo Nation has purchased an ownership interest in NGS, and the owner/operator has not increased net generating capacity of the Units at NGS.

(D) Alternative B applies if, by December 31, 2019, if one of the following occurs:

(1) Any of the Departing Participants sell their ownership interests in NGS to a Party other than the Navajo Nation that is not an Existing Participant, or

(2) Any of the Departing Participants remains as a participant in NGS.

(iii) By December 22, 2044, the owner/operator shall permanently cease conventional coal-fired electricity generation by all coal-fired Units at NGS.

(4) Reporting and implementation requirements for BART.

(i) No later than December 1, 2019, the owner/operator must notify EPA of the applicable Alternative for ensuring compliance with the 2009-2044 NOx Cap.

(ii) Beginning in 2015, and annually thereafter until the earlier of December 22, 2044 or the date on which the owner/operator ceases conventional coal-fired electricity generation by all coal-fired Units at NGS, the owner/operator must report to EPA, the annual heat input, the annual emissions of sulfur dioxide, carbon dioxide, and NOx from the previous full calendar year. In addition, the owner/operator must also report total cumulative emissions of NOx from NGS to assure compliance with the 2009-2044 NOx Cap and the 2009-2029 NOx Cap (if applicable). The owner/operator must make this report available to the public, either through a link on its Web site or directly on its Web site. The report must be made available within 30 days of the

submittal deadline associated with the annual emission inventory required by the Part 71 Operating Permit for NGS.

(iii) No later than December 31, 2020, the owner/operator must submit an application to revise its existing Part 71 Operating Permit to incorporate the requirements and emission limits of the applicable Alternative to BART under paragraph (j)(3) of this section. The Part 71 Operating Permit for NGS must incorporate practically enforceable limits for NOx of 0.24 lb/MMBtu, on a 30-day rolling average basis, for each Unit equipped with LNB/SOFA, and 0.07 lb/MMBtu, on a rolling average basis of 30 boiler operating days, for each Unit equipped with SCR, as federally enforceable permit conditions.

(iv) In addition to the requirements of paragraphs (j)(4)(i), (ii) and (iii) of this section, if Alternative B applies, the owner/operator must submit annual Emission Reduction Plans to the Regional Administrator.

(A) No later than December 31, 2019 and annually thereafter through December 31, 2028, the owner/operator must submit an Emission Reduction Plan containing anticipated year-by-year emissions from Units 1, 2, and 3 covering the period from 2020 to 2029 that will assure that the operation of NGS will result in emissions of NOx that do not exceed the 2009-2029 NOx Cap. The Emission Reduction Plan may contain several potential operating scenarios and must set forth the past annual actual emissions and the projected emissions for each potential operating scenario. Each potential operating scenario must demonstrate compliance with the 2009-2029 NOx Cap. The Emission Reduction Plan shall identify emission reduction measures that may include, but are not limited to, the installation of advanced emission controls, a reduction in generation output, or other operating strategies determined by the owner/operator. The owner/operator may revise the potential operating scenarios set forth in the Emission Reduction Plan, provided the revised plan ensure that NOx emissions remain below the 2009-2029 NOx Cap.

(B) No later than December 31, 2029 and annually thereafter, the owner/operator shall submit an Emission Reduction Plan containing year-by-year emissions covering the period from January 1, 2030 to December 31, 2044 that will assure that the operation of NGS will result in emissions of NOx that do not exceed the 2009-2044 NOx Cap. The Emission Reduction Plan shall identify emission reduction measures that may include, but are not limited to, the installation of advanced emission controls, a reduction in generation output, or other operating strategies determined by the owner/operator. The owner/operator may revise the potential operating scenarios set forth in the Emission Reduction Plan, provided the revised plan ensure that NOx emissions remain below the 2009-2044 NOx Cap.

(C) The requirement to submit annual Emission Reduction Plans beginning no later than December 31, 2019, shall be incorporated into the Part 71 Operating Permit for NGS as federally enforceable permit conditions.

(5) Continuous emission monitoring system (CEMS).

(i) At all times, the owner/operator of each unit must maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR part 75, to accurately measure NOx, diluent, and stack gas volumetric flow rate from each unit. All hourly valid data will be used to determine compliance with the emission limitations for NOx in paragraph (j)(3) of this section for each unit. If the CEMs data is not valid, that CEMs data shall be treated as missing data and

not used to calculate the emission average. CEMs data does not need to be bias adjusted as defined in 40 CFR part 75. Each required CEMS must obtain valid data for at least 90 percent of the unit operating hours, on an annual basis.

(ii) The owner/operator of each unit shall comply with the quality assurance procedures for CEMS found in 40 CFR part 75. In addition to these Part 75 requirements, relative accuracy test audits shall be calculated for both the NOx pounds per hour measurement and the heat input measurement. The calculation of NOx pounds per hour and heat input relative accuracy shall be evaluated each time the CEMS undergo relative accuracy testing.

(6) Compliance determination for NOx emission limits. (i) Compliance with the NOx emission limits under paragraphs (j)(3)(i) of this section shall be determined on a rolling average basis of thirty (30) Boiler Operating Days on a unit by unit basis. Compliance shall be calculated in accordance with the following procedure: Sum the total pounds of NOx emitted from the Unit during the current Boiler Operating Day and the previous twenty-nine (29) Boiler Operating Days; sum the total heat input to the Unit in MMBtu during the current Boiler Operating Day and the previous twenty-nine (29) Boiler Operating Days; and divide the total number of pounds of NOx by the total heat input in MMBtu during the thirty (30) Boiler Operating Days. A new 30 Boiler Operating Day rolling average shall be calculated for each new Boiler Operating Day. Each 30 Boiler Operating Day rolling average shall include all emissions that occur during periods within any Boiler Operating Day, including emissions from startup, shutdown, and malfunction.

(ii) If a valid NOx pounds per hour or heat input is not available for any hour for a Unit, that heat input and NOx pounds per hour shall not be used in the calculation for that 30 boiler operating day period.

(7) Recordkeeping. The owner/operator of each Unit must maintain the following records until the earlier of December 22, 2044 or the date that conventional coal-fired operation of all units at NGS permanently ceases:

(i) All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results as required by Part 75 and as necessary to calculate each units pounds of NOx and heat input for each hour.

(ii) Each Boiler Operating Day rolling average emission rate for NOx calculated in accordance with paragraph (j)(6)(i) of this section.

(iii) Each unit's 30 Boiler Operating Day pounds of NOx and heat input.

(iv) Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR part 75.

(v) Records of the relative accuracy calculation of the NOx lb/hr measurement and hourly heat input.

(vi) Any other records required by 40 CFR part 75.

(8) Reporting. All reports and notifications under this paragraph (j) must be submitted to the Director, Navajo Environmental Protection Agency, P.O. Box 339, Window Rock, Arizona 86515, and to the Director of Enforcement Division, U.S. EPA Region IX, at 75 Hawthorne Street, San Francisco, CA 94105.

(i) The owner/operator must notify EPA within two weeks after completion of installation of NOx control technology on any of the units subject to this section.

(ii) Within 30 days after the first applicable compliance date in paragraph (j)(3) of this section and within 30 days of every second calendar quarter thereafter (i.e., semi-annually), the owner/operator must submit a report that lists for each calendar day, calculated in accordance with paragraph (j)(6) of this section, total lb of NOx and heat input (as used to calculate compliance per paragraph (j)(6) of this section, for each unit's last 30 boiler operating days. The owner/operator must include the results of the last relative accuracy test audit and the calculated relative accuracy for lb/hr NOx and heat input performed 45 days prior to the end of that reporting period. The end of the year report shall also include the percent valid data for each NOx, diluent, and flow monitor used in the calculations of compliance with paragraph (j)(6) of this section.

(9) Enforcement. Notwithstanding any other provision in this implementation plan, any credible evidence or information relevant as to whether the unit would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed, can be used to establish whether or not the owner or operator has violated or is in violation of any standard or applicable emission limit in the plan.

(10) Equipment operations. At all times, including periods of startup, shutdown, and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the unit including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Administrator, or their designee, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the unit.

~~(11) Affirmative defense. The affirmative defense provisions of paragraphs (e)(2) and (i) of this section do not apply to this paragraph (j).~~