

**BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

IN THE MATTER OF)	
Public Service Company of New Mexico,)	
San Juan Generating Station	)	PETITION TO OBJECT TO
	)	ISSUANCE OF A STATE
	)	TITLE V OPERATING PERMIT
Permit Number: P062R2)	
)	
)	
Issued by the New Mexico Environment	)	Petition Number: VI-2010-
Department, Air Quality Bureau)	
)	
)	
_____)	

PETITION FOR OBJECTION

Pursuant to Section 505(b)(2) of the Clean Air Act and 40 C.F.R. § 70.8(d), WildEarth Guardians, the San Juan Citizens Alliance, and Carson Forest Watch (hereafter “Petitioners”) hereby petition the Administrator of the U.S. Environmental Protection Agency (“EPA”) to object to the New Mexico Environment Department, Air Quality Bureau’s (hereafter “NMED”) proposed issuance of the Title V operating permit (hereafter “Title V Permit”) for Public Service Company of New Mexico (hereafter “PNM”) to operate the San Juan Generating Station in San Juan County, New Mexico. *See* Exhibit 1, PNM, San Juan Generating Station Proposed Title V Permit, Permit Number P062R2 (Sept. 21, 2010).

INTRODUCTION

The San Juan Generating Station is a 1,848 megawatt coal-fired power plant located in San Juan County, New Mexico. According to the most recent proposed Statement of Basis for the proposed Title V Permit, the San Juan Generating Station is a:

coal-fired electric generating station located approximately 3 miles north-northeast of Waterflow, New Mexico. The facility consists of four coal-fired boilers (Units 1-4) which burn coal received by conveyors from the adjacent San Juan Mine to generate high-pressure steam that powers a steam turbine coupled with an electric generator. Electric power thus produced by the units is supplied to the electric power grid for sale. This is a pulverized coal fired power plant with 4 boilers.

See Exhibit 2, PNM, San Juan Generating Station, Proposed Statement of Basis, Proposed Title V Operating Permit Renewal (Oct. 25, 2010).



San Juan Generating Station with Homes in the Foreground
(image from Flickr, jonnypeace—use of image does not imply endorsement).

The coal-fired power plant has the potential to emit massive amounts of a number of toxic air pollutants every year, including:

- 24,710.1 tons of nitrogen oxides, as much as is released by 1.29 million passenger vehicles (according to the EPA, a passenger vehicle releases on average 38.2 pounds of NO_x annually, <http://www.epa.gov/otaq/consumer/f00013.htm> (last visited Nov. 19, 2010));
- 39,427.0 tons of carbon monoxide;
- 249 tons of volatile organic compounds (“VOCs”);
- 16,042 tons of sulfur dioxide (“SO₂”);
- 1,550 tons of particulate matter less than 10 microns in diameter (“PM₁₀”); and
- 74.6 tons of hazardous air pollutants (“HAPs”), including 48.1 tons of hydrofluoric acid, 15.8 tons of hydrochloric acid, and 49 pounds of mercury, a known neurotoxin.

See Exhibit 1 at 4; Mercury emissions data from EPA’s Toxic Release Inventory, http://www.epa.gov/cgi-bin/broker?view=COFA&trilib=TRIQ0&sort=VIEW_&sort_fmt=1&state=35&county=35045&chemical=ALL_&industry=2211&year=2009&tab_rpt=1&fld=RELLBY&fld=TSFDSP&se

[rvice=oiaa& program=xp tri.sasmacr.tristart.macro&OTHDISPD=Y](#) (last visited Nov. 19, 2010).

According to NMED, the proposed Title V Permit was submitted to EPA for review on August 4, 2010 and the EPA's 45-day review period ended on September 20, 2010. *See* Exhibit 3, E-mail from Joseph Kimbrell, Air Permit Specialist, NMED Air Quality Bureau (Sept. 22, 2010). Based on Petitioner's conversations with Region 6 EPA staff and NMED, the EPA did not object to the issuance of the Title V Permit. This petition is thus timely filed within 60 days following the conclusion of EPA's review period and failure to raise objections.

Although it appears as if NMED is preparing revisions to the proposed Title V Permit, and indeed the latest version of the Title V Permit appears to contain numerous additions and revisions, indicating that the Title V Permit is far from final, Petitioners have been informed that their 60 day window to file a petition is tolling.

This petition is based on objections to the permit raised with reasonable specificity during the public comment period. To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Petitioner requests the Administrator also consider this a petition to reopen the Title V Permit in accordance with 40 C.F.R. § 70.7(f).¹ A permit reopening and revision is mandated in this case because of one or both of the following reasons:

1. Material mistakes or inaccurate statements were made in establishing the terms and conditions in the permit. *See* 40 C.F.R. § 70.7(f)(1)(iii). As will be discussed in more detail, the Title V Permit suffers from material mistakes in violation of applicable requirements, etc.; and
2. The permit fails to assure compliance with the applicable requirements. *See*, 40 C.F.R. § 70.7(f)(1)(iv). As will be discussed in more detail, the Title V Permit fails to assure compliance with several applicable requirements.

PETITIONERS

WildEarth Guardians is a Santa Fe, New Mexico-based nonprofit membership group dedicating to protecting and restoring the American West. WildEarth Guardians has an office in Santa Fe and more than 1,200 members throughout New Mexico. Through its Climate and Energy Program, WildEarth Guardians advocates for cleaner energy, cleaner air, and more responsible use and development of fossil fuels.

¹ To the extent the Administrator may not believe citizens can petition for reopening for cause under 40 C.F.R. § 70.7(f), Petitioner also hereby petitions to reopen for cause in accordance with 40 C.F.R. § 70.7(f) pursuant to the Administrative Procedure Act, 5 U.S.C. § 553(e) (stating that any person has the "right to petition for the issuance...of a rule") and 5 U.S.C. § 555(b) ("an interested person may appear before an agency or its responsible employees for the presentation, adjustment, or determination of an issue, request, or controversy in a proceeding, whether interlocutory, summary, or otherwise, or in connection with an agency function").

San Juan Citizens Alliance is a nonprofit organization based in Durango, Colorado with offices in Farmington, New Mexico, that has over 500 members in the Four Corners region. San Juan Citizens Alliance is actively involved in energy development oversight, advocating for cleaner air and better stewardship of natural systems. San Juan Citizens Alliance promotes reduced energy consumption, energy efficiency, and clean, renewable energy to improve community health and prosperity.

Carson Forest Watch is a volunteer citizen group based in Peñasco, New Mexico that monitors forest resources on the national forests of northern New Mexico and southern Colorado, which are often impacted by air pollution from the San Juan Generating Station and other facilities in the region.

On May 7, 2010, WildEarth Guardians, the San Juan Citizens Alliance, and Carson Forest Watch submitted detailed comments regarding NMED's proposal to renew the Title V Permit for the San Juan Generating Station. *See* Exhibit 4, WildEarth Guardians, San Juan Citizens Alliance, Carson Forest Watch Comments on Draft Title V Permit (May 7, 2010). The objections raised in this petition were raised with reasonable specificity in comments on the draft Title V Permit.

Petitioners request the EPA object to the issuance of Permit Number P062R2 and/or find reopening for cause for the reasons set forth below.

GROUNDNS FOR OBJECTION/REOPENING

I. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE WITH PSD REQUIREMENTS

A Title V Permit is required to include emission limitations and standards that assure compliance with all applicable requirements, including requirements under the Clean Air Act's Prevention of Significant Deterioration ("PSD") program, at the time of permit issuance. *See* 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(c)(1). In this case, evidence indicate that PSD requirements are, in fact, applicable to the San Juan Generating Station and that the facility is currently in violation of PSD requirements. Despite this, the Title V Permit fails to both assure compliance with PSD and to bring the San Juan Generating Station into compliance with PSD through a compliance plan.

Pursuant to Part C of the Clean Air Act, a source cannot construct or operate a major source or major modification of a major source without first obtaining a permit. *See* 42 U.S.C. § 7475(a). This requirement is echoed in federal regulations and in the New Mexico State Implementation Plan ("SIP"). *See* 40 C.F.R. § 51.166(a)(7)(iii) and the New Mexico SIP, 20.2.74.200.C New Mexico Administrative Code ("NMAC"). Among other requirements, federal requirements and the New Mexico SIP further prohibit the operation of a major stationary source after a major modification unless the source has applied Best Available Control Technology ("BACT") to control emissions of harmful air pollutants. *See* 40 C.F.R. § 51.166(j), 40 C.F.R. § 52.21(j), and the New Mexico SIP, 20.2.74.302 NMAC.

The San Juan Generating Station is a major stationary source within an area classified as attainment for all criteria pollutants. However, according to information brought to light by the EPA and both expressly and impliedly confirmed by NMED, the San Juan Generating Stations never obtained PSD permits both for the initial construction of at least units 1, 3 and 4, and likely unit 2, and for the recent addition of low-NO_x burners on all four units.

Accordingly, NMED was both required to prepare a Title V Permit that includes PSD requirements, including BACT requirements, and to include a compliance plan to bring the facility into compliance in accordance with 42 U.S.C. §§ 7661b(b) and 7661c(a) and 40 C.F.R. § 70.6(b)(3). Unfortunately, NMED failed to do so. The Administrator must therefore object to the issuance of the Title V Permit for the San Juan Generating Station. Evidence of noncompliance with PSD requirements and the failure of the Title V Permit to ensure compliance with applicable requirements are as follows:

A. The San Juan Generating Station was Required to Obtain PSD Permits Prior to Construction—It has yet to Obtain Such Permits

PNM never obtained PSD permits for the initial construction of units 1-4, yet it appears that the permitting and construction of at least units 1, 3 and 4 occurred subsequent to the effective date of the EPA's PSD program on June 1, 1975. Therefore, it appears that PNM was required to obtain PSD permits for at least units 1, 3, and 4 in accordance with 40 C.F.R. § 52.21 (1975).

NMED did not address this issue in proposing to issue the Title V Permit. In the Statement of Basis for the proposed Title V Permit, NMED discloses that permits were issued for the construction of units 1, 3, and 4 in 1975, 1982, and on September 15, 1975, respectively. *See* Exh. 2 at 6. However, these permits were not PSD permits and there is no evidence that, at least with regards to units 1, 3, and 4, the units have been subjected to PSD requirements since their initial construction, in violation of the Clean Air Act.

EPA itself has flagged this as a major issue of concern. In comments sent to NMED on September 20, 2010, EPA stated:

At this time, I continue to have serious concerns that this source may be PSD applicable, despite your replies to my earlier questions on 1) PSD analysis, claiming summary judgement on 2 of the 4 boilers (#3 and #4) at this site in Federal Court on Consent Decree that they are not (no mention is made of the other 2 boilers, i.e., Units #1 and #2); in addition to 2) a more recent response on no collateral increase in CO emissions from the Consent Decree required Low NO_x burner installations on each of the boilers.

NMED provided Court documents on the first subject, but there does not appear to be enough information in them on the "EPA" finding of non-PSD applicability to make a determination on this subject. I cannot locate any supporting records at R6 for this finding, and in a telephone communiqué with Ned Jerabek and you on 9/20/10, Ned indicated there may not be any records of the phone conversation at your Agency either. There are two phases of PSD applicability that occurred during construction phases of

this source, and the material presented so far on “commencement of construction” from this action, our records including previous applications from this source, the Court records provided, and your clarifications indicate numerous discrepancies on construction dates for at least the #1, #3 and #4 boilers at this plant. With the question remaining unanswered on PSD applicability analysis, and to verify past PSD applicability, we request a copy of all records in the NMED permit file for this source. Please forward as soon as possible.

Exhibit 5, Comments from Catherine Penland, Air Permits Section, EPA Region 6 to Joseph Kimbrell, Title V Permits Engineer, New Mexico Environment Department, Air Quality Bureau (Sept. 20, 2010) at 1. As is evident, there are serious questions over whether the San Juan Generating Station is operating in compliance with PSD. NMED was at least obligated to investigate whether the San Juan Generating Station was in compliance with PSD to ensure compliance with applicable requirements in accordance with Title V.

NMED may claim that EPA has already determined that PSD does not apply, at least with regards to units 3 and 4, citing the U.S. District Court for the District of New Mexico’s ruling in *Grand Canyon Trust v. Public Service Co.*, 283 F. Supp. 2d 1249 (D.N.M. 2003). In this ruling on a Clean Air Act citizen suit, the Court held that a phone call from EPA to NMED’s predecessor, the New Mexico Environmental Improvement Agency, constituted final agency action sufficient to uphold a finding that PSD was not applicable to units 3 and 4. The court dismissed the suit for lack of jurisdiction, at least with regards to the PSD claims.

This ruling, however, missed the point. EPA never made a formal finding that PSD did not apply to units 3 and 4. As EPA noted in its comment to NMED, no “supporting records” exist to demonstrate that EPA undertook final agency action to conclude that PSD did not apply to units 3 and 4. Furthermore, to the extent it could be argued that EPA undertook final agency action through a phone call for which no records exist, this action was simply wrong. Any EPA finding that PSD was not applicable to units 3 and 4 defies the fact that permits were issued and construction began units subsequent to the effective date of EPA’s 1975 PSD regulations at 40 C.F.R. § 52.21 (1975). ***EPA itself seems to recognize that any prior determination was in error.***

It is important to note that in *Grand Canyon Trust* the Court did not uphold EPA’s supposed determination that PSD was not applicable to units 3 and 4. Rather, the Court simply ruled that it lacked jurisdiction to review the claim as to whether PSD applied in light of EPA’s supposed final action on the matter. This ruling does not absolve NMED from assuring, above all, that units 3 and 4 are operating in compliance with all applicable requirements and to take appropriate action pursuant to Title V if they are not in compliance. EPA reaffirms this position, stating in comments to NMED:

Whitepaper 1 has discussed the process for handling possible PSD/NSR violations prior to issuance of a Title V permit. Even though White Paper 1 states that companies “are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications.” White Paper I further states, “However, EPA expects companies to rectify past noncompliance as it is discovered.

Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper I, part II, section H] it continues, “EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the Part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper 1, part II, section H.

Since the Title V permits must have all applicable requirements, NMED must first determine if there is a violation of the SIP/PSD rules. The record should clearly address why NMED did not consider or re-evaluate the PSD applicability of Boilers 1, 3 and 4 for this action, since the emissions are far above the major source determinations, and construction appears to have commenced (by some conflicting dates, as previously noted) after the Federal PSD applicability dates.

Exh. 5 at 2 (footnote removed).²

NMED may also claim that it was not required to assess PSD applicability in the context of the Title V Permit. Indeed, NMED states in the Statement of Basis that, “Title V action does not determine PSD applicability[.]” Exh. 2 at 3. “However, to ensure compliance with applicable requirements, NMED necessarily must assess whether the facility is in compliance with PSD requirements. If the facility is not in compliance, it must remedy this noncompliance by writing a permit that both assures compliance and contains a compliance plan.

To this end, NMED may also claim that PSD does not apply with regards to the initial construction because, “...the facility was constructed prior to the applicability of 20.2.74 NMAC[.]” Exh. 2 at 3. However, in assessing whether the Title V Permit assures compliance with applicable requirements, NMED is not limited solely to assessing whether the facility is in compliance with the New Mexico SIP. Applicable requirements include, among other things, “Any standard...promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act[.]” 40 C.F.R. § 70.2 (definition of “applicable requirement”). In this case, NMED was obligated to assess whether PNM was in violation of 40 C.F.R. § 52.21—a standard promulgated by EPA implementing the PSD preconstruction requirements under Title I of the Clean Air Act—due to its failure to obtain PSD permits for the construction of units 1, 3, and 4. If a finding of noncompliance was found, NMED was further obligated to address this in any Title V Permit.

The Administrator therefore has a nondiscretionary duty to object to the issuance of the Title V Permit for the San Juan Generating Station on the basis that it fails to ensure compliance with PSD requirements under the Clean Air Act.

² “White Paper 1” refers to Memo from Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, to Air Directors, Regions I-X, *White Paper for Streamlined Development of Part 70 Permit Applications* (July 10, 1995).

Although the Administrator may argue that Petitioners failed to comment with reasonable specificity on this issue, the grounds for Petitioners' concerns over this issue arose after the public comment period on the draft Title V Permit. These concerns came to light only after Petitioners received EPA's comments on the proposed Title V Permit. After attempting to obtain a copy of these comments from NMED on September 22, 2010, Petitioners received these comments only after contacting EPA on October 15, 2010. *See* Exhibit 6, E-mail from Catherine Penland, EPA Region 6 (Oct. 15, 2010). During the public comment period and based on the information provided by NMED to the public, Petitioners had no reason to believe that the issue of PSD applicability as it relates to the construction of units 1, 3, and 4, remained relevant.

However, to the extent that the Administrator disagrees with Petitioners' contention that the grounds for this issue arose subsequent to the public comment period, such a disagreement does not absolve her from addressing whether reopening of the Title V Permit is warranted in accordance with 40 C.F.R. § 70.7(f).

B. The Title V Permit Fails to Bring the Facility into Compliance with PSD with Regards to Significant Increases in Carbon Monoxide Emissions

The Title V Permit also fails to assure compliance with PSD because it fails to address significant increases in carbon monoxide emissions that occurred as a result of the installation of low-NO_x burners on all four units at the San Juan Generating Station in 2006.

This issue was also raised by the EPA in their September 20, 2010 comments. *See* Exh. 5 at 1-2. In response, NMED conceded that, in fact, it had failed to address increases in carbon monoxide emissions and that, upon further investigation, the Title V Permit failed to assure compliance with PSD with regards to recent significant increases in carbon monoxide emissions. NMED responded:

As discussed in the telephone call on 9/20/2010 with Cathy Penland, Ned Jerabek, and Joe Kimbrell, NMED did re-evaluate the CO emission increase/decrease associated with the project to install low NO_x burners that were authorized by NSR permit 0063M3 and required by the Consent Decree. PNM did not request any increase in allowable CO emission limits to accommodate the installation of the low NO_x burners. Quarterly CO emissions test using EPA Method 10 demonstrate that the emission limits that were established prior to the installation of the low NO_x burners have not been violated.

In the NSR Permit 0063M2 issued January 22, 1997, the CO emissions for the four boilers were calculated using AP-42 emissions factors correlating to the type operation at SJGS. That emission was and still is 0.5 lbs of CO per ton of coal combusted. Since the rate of combustion was different for the units, the corresponding CO emission limits were: Unit 1 (E301) 92.9 lbs/hr; Unit 2 (E302) 95.4 lbs/hr, Unit 3 (E304) 144.2 lbs/hr, and Unit 4 (E304) 141.5 lbs/hr. These CO limits were required in the Title V permit P062-R1 issued February 4, 2005. Under Title V requirements PNM was required to perform initial compliance testing of CO using EPA Method 10 within six months

following the issuance of Permit P062R1. This testing was to verify for the first time that the CO emission limits were adequately set to represent this facility.

PNM conducted the first CO test in May 2005, resulting in CO emission rates far exceeding permit limits. PNM, using the CO test results submitted an application to modify the permit to account for the existing, “before now” unknown emission rates to better reflect the actual facility conditions. Additional CO testing in July 2005, redistributed the requested CO increases to the levels permitted today: Unit 1 (E301) 3,000 lbs/hr; Unit 2 (E302), Unit 3 (E304), and Unit 4 (E304) 2,000 lbs/hr.

The CO emission limits currently permitted were first established by NSR Permit 0063M3 dated September 20, 2005. These CO emission increases were not due to any modification of the facility and did not trigger a PSD analysis.

Permit 0063M4 dated September 18, 2006 which authorized the installation of the low NOx burners did not alter or change the CO emission limits for the facility. The facility is currently in compliance with the CO emission limits.

The question was asked, “Why is there such a large discrepancy between the CO emission rates based on AP-42 emission factors and those from the emission tests if these increased emissions were not due to facility modifications?” AP-42 emission factors were established to represent emissions for the average population of facility surveyed by EPA. Facilities as large as SJGS are custom built and only through actual emission testing can anyone know what the true emissions are.

On October 4, 2010, we re-evaluated the PSD applicability of the Installation of the Low NOx Burner via NSR Permit 0063M4, issued 9/18/2006.

- PNM didn't request an increase in the allowable CO limits to accomplish the installation of the Low NOx Burners.
- However, PSD regulations require the comparison of past actuals to future projected actuals when determining if a project is significant or not. PNM in effect stated in the 0063M4 permitting process that the future potential actuals from the Low NOx Burner Installation was not going to be different from past actuals.
- Now that all of the Low NOx Burners have been installed (last unit became operational on 3/31/2009), we are now able to compare CO emission past actuals with future actuals for the Low NOx Burner Project. A comparison of the Quarterly CO Test results from May, 2006 which is prior to the installation of the Low NOx Burners to the Quarterly Test results from 2010 which is after the last Unit was retrofitted with the Low NOx Burners is shown here.

		Past Actuals Pre-Low Nox Burner installation May 15-17, 2006			
3-run avg		Unit 1	Unit 2	Unit 3	Unit 4
CO (lb/MMBtu)		0.757	0.098	0.033	0.137

CO (lb/hr)	2164.4	331.2	152.1	629.7
CO (tpy)	9480.1	1450.7	666.1	2758.1

3-run avg	Future Projected Actuals Post-Low Nox Burner installation			
	6/15/2010	4/21/2010	8/24/2010	5/27/2010
	Unit 1	Unit 2	Unit 3	Unit 4
CO (lb/MMBtu)	0.634	0.523	0.2	0.326
CO (lb/hr)	2215	1760	1201.9	1804.8
CO (tpy)	9701.7	7708.8	5264.3	7905.0

	Increase in Actuals due to Low Nox Burner Installation			
	Unit 1	Unit 2	Unit 3	Unit 4
CO (lb/MMBtu)	-0.123	0.425	0.167	0.189
CO (lb/hr)	50.6	1428.8	1049.8	1175.1
CO (tpy)	221.6	6258.1	4598.222	5146.924

- ***This comparison clearly shows that all four units individually and combined exceed the 100 tons/year increase threshold for CO PSD significance. Therefore, it is our conclusion that NSR Permit 0063M4 should have been a PSD Permit or processed as a PSD permit.***
- ***It is our intent to add a Compliance Plan in the current Title V Permit P062R2 for PNM to submit a PSD application to address the significant increase in CO from the construction of the low NOx Burners.***

Exhibit 7, NMED Response to EPA Comments (Oct. 29, 2010) at 2-3 (emphasis added).

Clearly NMED’s comments indicate the Title V Permit is required to bring the San Juan Generating Station into compliance with PSD with regards to the significant increases in carbon monoxide resulting from the installation of low-NO_x burners. Unfortunately, the Title V Permit, as proposed, does not bring the facility into compliance with PSD. Although NMED intends “to add a Compliance Plan in the current Title V Permit,” this does not remedy the fact that the proposed Title V Permit fails to assure compliance with applicable requirements. The Administrator must therefore object.

Although the Administrator may argue that Petitioners failed to comment with reasonable specificity on this issue, the grounds for Petitioners’ concerns over this issue arose after the public comment period on the draft Title V Permit. These concerns came to light only after Petitioners received EPA’s comments on the proposed Title V Permit. After attempting to obtain a copy of these comments from NMED on September 22, 2010, Petitioners received these comments only after contacting EPA on October 15, 2010. See Exhibit 6, E-mail from Catherine Penland, EPA Region 6 (Oct. 15, 2010). During the public comment period and based on the information provided by NMED to the public, Petitioners had no reason to believe that the issue of PSD applicability as it related to units 1-4 was an issue with regards to carbon monoxide emissions. Indeed, NMED only completed an actual analysis of the carbon monoxide increases on October 10, 2010. Thus, Petitioner could not have possibly commented on the adequacy of the Title V Permit in this regard.

However, to the extent that the Administrator disagrees with Petitioners' contention that the grounds for this issue arose subsequent to the public comment period, such a disagreement does not absolve her from addressing whether reopening of the Title V Permit is warranted in accordance with 40 C.F.R. § 70.7(f).

II. THE TITLE V PERMIT FAILS TO ENSURE COMPLIANCE WITH SOURCE IMPACT ANALYSIS REQUIREMENTS IN THE NEW MEXICO STATE IMPLEMENTATION PLAN

NMED failed to ensure that the applicable NO_x and particulate matter emission limits set forth in the Title V Permit were based on an actual analysis of ambient air quality impacts, as required by the New Mexico SIP at 20.2.72.208.D. NMAC.

This SIP provision states that NMED shall deny any permit for construction, modification, or revision if it would “cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico Air Quality Standard unless the ambient air impacts is offset by meeting the requirements of either 20.2.29 NMAC or 20.2.72.216 NMAC[.]” 20.2.72.208.D. NMAC. In this case, it is not apparent that NMED assessed the NO_x and particulate matter emission limits specifically to ensure that the San Juan Generating Station would not cause or contribute to exceedances of the ozone, nitrogen dioxide (“NO₂”), and particulate matter less than 2.5 microns in diameter (“PM_{2.5}”) National Ambient Air Quality Standards (“NAAQS”). This is of serious concern in light of the fact that several new permit modifications have recently been undertaken and new permits have been issued—including, but not limited to permits 0063M3, 0063M4, 0063-M6, and 0063M6R1—meaning NMED had an affirmative duty to ensure that the permit limits would protect the NAAQS in accordance with its SIP.

Our concerns over this issue are bolstered by the fact that the San Juan Generating Station has never obtained a PSD permit. As discussed above, PNM never obtained PSD permits for the construction of units 1, 3, and 4, and never obtained a PSD permit for recent significant increases in carbon monoxide emissions resulting from the installation of low-NO_x burners. An analysis of impacts to ambient air quality is a fundamental requirement of the PSD permitting requirement. *See* 42 U.S.C. § 7475(a)(3) (stating, among other things, that a demonstration is required showing that a source “will not cause, or contribute to, air pollution in excess of any...national ambient air quality standard[.]”); *see also*, New Mexico SIP, 20.2.74.302.D.4 NMAC.

NMED attempts to argue that source impact analysis requirements in the New Mexico SIP only apply to New Source Review (“NSR”) permits, and therefore implies that they are irrelevant in the context of the San Juan Generating Station Title V Permit. This argument misses the point entirely. A Title V Permit must ensure compliance with applicable requirements, including the need to ensure that all underlying NSR permits issued to the San Juan Generating Station were supported by source impact analyses. If an underlying NSR permit was issued without the completion of a source impact analysis in accordance with the SIP, then

the Title V Permit must contain provisions that bring the facility into compliance with this requirement.

In this case, there is simply no indication that any analysis of ozone, NO₂, PM_{2.5} impacts has ever been completed for any NSR permit issued for any pollutant emitting activity at the San Juan Generating Station. Indeed, NMED only asserts that “air dispersion modeling [was] conducted for [NSR permit 0063M6R1] or previous permitting action(s) [and] demonstrated compliance with the NAAQS.” Exhibit 8, NMED Response to WildEarth Guardians’ Comments on Draft Title V Permit P062R2 at 2. However, this is simply erroneous. There is no information or analysis presented, cited, or otherwise referenced by NMED indicating that any analysis of the impacts of the San Juan Generating Station to ambient concentrations of ozone, NO₂, and PM_{2.5} has ever been completed, particularly in conjunction with the initial construction of units 1, 3, and 4 and the recent major modification that occurred as a result of the installation of low-NO_x burners and concurrent significant increase in carbon monoxide emissions. At the least, NMED has never prepared an analysis of impacts to ambient concentrations of ozone, NO₂, and PM_{2.5} based on the requirements specified in 40 C.F.R. § 51, Appendix W, as required by 40 C.F.R. § 52.21(l). The Administrator must therefore object.

III. THE TITLE V PERMIT FAILS TO REQUIRE PROMPT REPORTING OF DEVIATIONS

Condition B110.C of the Title V Permit requires reporting of permit deviations only once every six months. This does not constitute prompt reporting of permit deviations, as required by the Clean Air Act, 42 U.S.C. 7661b(b)(2), and Title V regulations, 40 C.F.R. § 70.6(a)(3)(iii)(B).

Prompt reporting is typically defined “in relation to the degree and type of deviation likely to occur and the applicable requirements.” 40 C.F.R. § 70.6(a)(3)(iii)(B). In explaining the meaning of “prompt,” the House Report for the CAA Amendments of 1990 stated that “the permittee would presumably be required to report that violation without delay.” H.F. Rep. No. 101-490, pt. 1, at 348 (1990). In commenting on other proposed state operating permit programs, the EPA has explained:

In general, the EPA believes that ‘prompt’ should be defined as requiring reporting within two to ten days for deviations that may result in emissions increases. Two to ten day is sufficient time in most cases to protect public health and safety as well as to provide a forewarning of potential problems.

Clean Air Act Proposed Interim Approval of Operating Permits Program: State of New York, 61 Fed. Reg. 39617-39602 (July 30, 1996). Most recently, the second circuit court of appeals held that “prompt” for purposes of prompt reporting of permit deviations must at least be less than every six months depending upon the source’s compliance history and public health risk. *NYPiRG v. Johnson*, 427 F.3d 172 (2nd Cir. 2005). Clearly, reporting permit deviations only once every six months, as the Title V Permit requires, does not constitute prompt reporting.

Currently, Condition B110.C only requires semiannual reporting of deviations—or once every six months, regardless of the nature of the deviation. Clearly this does not constitute prompt reporting in accordance with 42 U.S.C. 7661b(b)(2) and 40 C.F.R. § 70.6(a)(3)(iii)(B).

In response to comments, NMED asserts that Condition B110.D requires reporting of excess emissions in accordance with 20.2.7.110 NMAC. *See* Exh. 8 at 4. It is true that B110.D sets requirements for the reporting of excess emissions, which could be a type of deviation. However, NMED does not explain why it believes the requirements of B110.D, which references 20.2.7.110 NMAC, constitute “prompt” in the context of requiring prompt reporting. The requirement simply states that an initial report of an excess emission must be reported “no later than the end of the next regular business day after the time of discovery.” 20.2.7.110.A(1) NMAC. However, this would mean that if an excess emission occurred on a Friday, the source would not be required to report until the end of the following Monday, the next regular business day—conceivably up to four days. Prompt reporting is typically defined “in relation to the degree and type of deviation likely to occur and the applicable requirements” (40 C.F.R. § 70.6(a)(3)(iii)(B)), so it is unclear how this requirement represents a reporting requirement that reflects consideration of “the degree and type of deviation likely to occur.” It is notable that EPA Title V regulations require reporting of deviations from hazardous or toxic air pollutant emission limits “with[in] 24 hours of the occurrence.” 40 C.F.R. § 71.(a)(3)(iii)(B)(1).

Furthermore, the 2005 Consent Decree over violations at the San Juan Generating Station specifically requires that excess opacity emissions occurring during startups, shutdowns, malfunctions, or emergencies, or occurring when both the boiler and all fans that move flue gas in the unit are off, requires that such deviations be reported “by facsimile no later than twenty-four (24) hours after the start of the next business day and...in writing no later than ten (10) calendar days after the start of the first business day following the reading[.]” Exhibit 9, Consent Decree Entered in *Grand Canyon Trust, et al. v. Public Service Co. of New Mexico*, CV 02-552 BB/ACT (ACE) (D.N.M. 2005) at (9)(a)(vi). Clearly, underlying applicable requirements demand more frequent reporting of deviations than the Title V Permit currently provides for.

The Administrator must object to the issuance of the Title V Permit on the basis that it fails to ensure prompt reporting of all permit deviations—including excess emissions—in accordance with 42 U.S.C. 7661b(b)(2), and 40 C.F.R. § 70.6(a)(3)(iii)(B).

IV. THE TITLE V PERMIT FAILS TO REQUIRE SUFFICIENT PERIODIC MONITORING

Permitting authorities must ensure that a Title V Permit contain monitoring that assures compliance with the terms and conditions of the permit. *See* 42 U.S.C. § 7661c(c) and 40 C.F.R. § 70.6(c)(1). Although as a basic matter, Title V Permits must require sufficient periodic monitoring when the underlying applicable requirements do not require monitoring (*see* 40 C.F.R. § 70.6(a)(3)(i)(B)), the D.C. Circuit Court of Appeals has firmly held that even when the underlying applicable requirements require monitoring, permitting authorities must supplement this monitoring if it is inadequate to ensure compliance with the terms and conditions of the permit. As the D.C. Circuit recently explained:

[40 CFR § 70.6(c)(1)] serves as a gap-filler....In other words, § 70.6(c)(1) ensures that all Title V permits include monitoring requirements “sufficient to assure compliance with the terms and conditions of the permit,” even when § 70.6(a)(3)(i)(A) and § 70.6(a)(3)(i)(B) are not applicable. This reading provides precisely what we have concluded the Act requires: a permitting authority may supplement an inadequate monitoring requirement so that the requirement will “assure compliance with the permit terms and conditions.”

See Sierra Club v. EPA, 536 F.3d 673, 680 (D.C. Cir. 2008). In other words, “a monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit[.]” *Id.* at 677.

In this case, the Title V Permit fails to contain monitoring requirements that ensure compliance with underlying particulate matter limits for the four coal-fired boilers. The Title V Permit establishes particulate limits for the coal-fired boilers at Condition A106.A, setting forth pound per hour emission limits, ton per year emission limits, and pound per million btu (“lb/mmbtu”) emission limits. Unfortunately, the prescribed monitoring fails to ensure compliance with these emission limits.

Of particular concern is that the Title V Permit exempts monitoring altogether for particulate matter. Condition B108.D states that monitoring may be foregone altogether for two monitoring periods if individually, units 1, 2, 3, or 4 have operated for less than 25% of a monitoring period, and may even be foregone for a longer period of time if units 1, 2, 3, or 4 operate for less than 10% of any monitoring period. This Condition is problematic. As a practical matter, it allows the San Juan Generating Station to forego particulate matter monitoring altogether if units 1, 2, 3, or 4 operate less than 25% of a monitoring period. This can hardly serve to ensure compliance with the applicable particulate matter emission limits.

Although NMED asserts that, “The intent of this exemption is to reduce the possibility that equipment that is not monitoring must be started up for the sole purpose of monitoring” (Exh. 8 at 6), the practical result of this exemption is PNM would be allowed to operate units 1, 2, 3, or 4 for upwards of 90 days annually without being required to conduct any particulate matter monitoring. Indeed, 25% of a quarterly monitoring period would amount to around 22 days. With four quarters annually, this amounts to nearly 90 days that PNM could be allowed to avoid monitoring altogether. It is unclear how this would ensure continuous compliance with hourly or lb/mmbtu emission limits. The fact that PNM could be allowed to avoid monitoring altogether if it only operates units 1, 2, 3, or 4 for 10% or less than any monitoring period—9 days a quarter or 36 days a year—underscores the inappropriateness of including Condition B108.D in the Title V Permit due to its failure to ensure sufficient periodic monitoring that assures compliance with applicable particulate matter limits. The Administrator must therefore object.

The Title V Permit fails to require any monitoring of emissions related to duct leaks from units 1-4. The Title V Permit expressly limits emissions of NO_x, SO₂, carbon monoxide, and particulate matter from duct leaks at Condition A106.D. However, the Title V Permit actually sets forth no explicit monitoring of such emissions to ensure compliance, and therefore fails to

ensure sufficient monitoring. Although the Title V Permit requires that PNM conduct a duct leak management program in accordance with Condition A402.C, it is unclear exactly what this program entails and how it will ensure compliance with the emission limits for duct leaks. Indeed, it does not even appear as if the duct leak management program has been prepared, or that NMED has assured its effectiveness in appropriately limiting emissions of NO_x, SO₂, carbon monoxide, and particulate matter from duct leaks. Condition A402.C states that compliance with the duct leak management program will be determined “using data generated by the monitoring and by Department inspections of the units,” but it is unclear exactly what monitoring data will be generated and what NMED will inspect to ensure compliance. Not only is the duct leak management program vague, it does not appear as if any specific standards exist to ensure that any duct leak management program is implemented to ensure compliance with applicable emission limits. We are particularly troubled at the fact that there are no limits on the number of leaking ducts, or leaking points along any ducts. Fundamentally, the Title V Permit simply does not require sufficient monitoring to assure compliance with the duct leak emission limits for NO_x, SO₂, carbon monoxide, and particulate matter. The Administrator must therefore object.

V. CONDITION B112.E IS CONTRARY TO APPLICABLE REQUIREMENTS

Condition B112.E states that “For sources that have submitted air dispersion modeling that demonstrates compliance with federal ambient air quality standards, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with federal ambient air quality standards specified at 40 CFR 50 NAAQS.” This Condition implies that compliance with the Title V Permit automatically means that the NAAQS will be protected.

This Condition is contrary to the Clean Air Act. NMED cannot automatically conclude that compliance with a Title V Permit assures compliance with the NAAQS. The agency must first prepare an analysis and assessment of emissions to make such a finding, and even then must do so on a source-by-source basis, both individually and cumulatively. *See e.g.*, 40 C.F.R. § 51.160. Furthermore, because the NAAQS are revised every five years (*see* 42 U.S.C. § 7409(d)(1)), it is further inappropriate given that permit terms and conditions rarely are revised, and at least are not required to be revised as the NAAQS are revised.

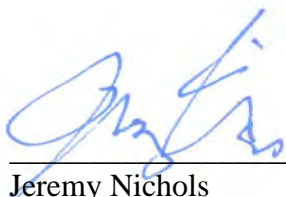
This Condition is particularly problematic in light of the fact that the construction permits issued for the San Juan Generating Station were issued prior to the promulgation of several NAAQS. For example, the Statement of Basis indicates that permits were issued in 2006, 2005, 1997, 1987, 1982, 1975, and 1973, all predating many of the current NAAQS, including the 2006 annual and 24-hour PM_{2.5} NAAQS (*see* 40 C.F.R. § 50.13), the 2008 8-hour ozone NAAQS (*see* 40 C.F.R. § 50.15), the 2010 annual and hourly NO₂ NAAQS (*see* 75 Fed. Reg. 6474-6537 (Feb. 9, 2010)), and the 2010 hourly SO₂ NAAQS (*see* 75 Fed. Reg. 35520-35603 (June 22, 2010)). This Condition is further problematic because, as explained, the San Juan Generating Station is currently operating in violation of PSD requirements and therefore, NMED has failed to prepare the necessary analyses to demonstrate that operation of the San Juan Generating Station will not cause or contribute to violations of the NAAQS.

The Title V Permit cannot include a provision that automatically concludes operation of the San Juan Generating Station will protect any and all NAAQS specified at 40 C.F.R. § 50. The Administrator must therefore object to the issuance of the Title V Permit.

CONCLUSION

For the reasons stated above, Petitioners request the Administrator object to and/or reopen the Title V Permit issued by the NMED for PNM to operate the San Juan Generating Station. The Administrator has a nondiscretionary duty to issue an objection to the Title V Permit within 60 days in accordance with Section 505(b)(2) of the Clean Air Act.

Respectfully submitted this 19th day of November 2010



Jeremy Nichols
Climate and Energy Program Director
WildEarth Guardians
1536 Wynkoop, Suite 301
Denver, CO 80202
(303) 573-4898 x 1303
jnichols@wildearthguardians.org

and

Mike Eisenfeld
New Mexico Energy Coordinator
San Juan Citizens Alliance
Farmington, NM
(505) 360-8994
meisenfeld@frontier.net

Joanie Berde
Carson Forest Watch
Box 15
Llano, NM 87543
joanieberde@yahoo.com

cc: Mary Uhl
Air Quality Bureau Chief
New Mexico Environment Department
1301 Siler Road Building B

Santa Fe, NM 87507

Al Armendariz
Regional Administrator
U.S. EPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202

Public Service Company of New Mexico
Alvarado Square
Albuquerque, NM 87158

TABLE OF EXHIBITS

1. PNM, San Juan Generating Station Proposed Title V Permit, Permit Number P062R2 (Sept. 21, 2010).
2. PNM, San Juan Generating Station, Proposed Statement of Basis, Proposed Title V Operating Permit Renewal (Oct. 25, 2010).
3. E-mail from Joseph Kimbrell, Air Permit Specialist, NMED Air Quality Bureau (Sept. 22, 2010).
4. WildEarth Guardians, San Juan Citizens Alliance, Carson Forest Watch Comments on Draft Title V Permit (May 7, 2010).
5. Comments from Catherine Penland, Air Permits Section, EPA Region 6 to Joseph Kimbrell, Title V Permits Engineer, New Mexico Environment Department, Air Quality Bureau (Sept. 20, 2010).
6. E-mail from Catherine Penland, EPA Region 6 (Oct. 15, 2010).
7. NMED Response to EPA Comments (Oct. 29, 2010).
8. NMED Response to WildEarth Guardians' Comments on Draft Title V Permit P062R2.
9. Consent Decree Entered in *Grand Canyon Trust, et al. v. Public Service Co. of New Mexico*, CV 02-552 BB/ACT (ACE) (D.N.M. 2005).



BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

New Mexico
ENVIRONMENT DEPARTMENT

Air Quality Bureau

1301 Siler Road, Building B
Santa Fe, NM 87507-3113
Phone (505) 476-4300
Fax (505) 476-4375
www.nmenv.state.nm.us



RON CURRY
Secretary

SARAH COTTRELL
Deputy Secretary

TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No: xxxx xxxx xxxx xxxx
Return Receipt Requested

Operating Permit No: P062R2
Facility Name: San Juan Generating Station

Facility Owners: Unit 1: Public Service Company of New Mexico; Tucson Electric Power
Unit 2: Public Service Company of New Mexico; Tucson Electric Power
Unit 3: Public Service Company of New Mexico; Southern California Public Power Authority; Tri-State Generation and Transmission Association, Inc.
Unit 4: Public Service Company of New Mexico; Utah Associated Municipal Power Systems; City of Farmington, New Mexico; M-S-R Public Power Authority; City of Anaheim, California; Los Alamos County, New Mexico

Operator/Permittee Name: Public Service Company of New Mexico (PNM)

Mailing Address: [Alvarado Square, Albuquerque, NM 87158](#)

TEMPO/IDEA ID No: 1421-PRT20090001
AIRS No: 35-045-00902
Permitting Action: Title V Renewal

Air Quality Bureau Contact: Joseph Kimbrell
Main AQB Phone No. (505) 476-4300

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Deleted: 2401 Aztec Road NE, Albuquerque, NM 87107

Mary Uhl
Bureau Chief
Air Quality Bureau

Date

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Save Date: [9/21/2010 12:34:00 PM](#)
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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

- A. [Not Applicable](#)

A101 Permit Duration (expiration)

- B. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)
- C. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate beyond the expiration date, provided that a timely renewal application is submitted no later than twelve (12) months prior to the expiration date. (20.2.70.400.D NMAC)

A102 Facility: Description

- A. This facility consists of four coal-fired electric generating units and associated support facilities. Each coal-fired unit burns pulverized coal and No. 2 Diesel oil in a boiler and produces high-pressure steam which powers a steam turbine coupled with an electrical generator. Electrical power produced by the units is supplied to the electric power grid for sale. Coal for the units is supplied by the adjacent San Juan Mine and is delivered to the facility by conveyor. For the purposes of this permit, the four generating units at San Juan Generating Station are designated Unit 1, Unit 2, Unit 3, and Unit 4.
- B. This facility is located at UTM Zone 12, UTMH 728.523 km, UTMV 4075.606 km, in Township 30N, Range 15W, Sections 16-21, 29, 30, approximately 3 miles north-northeast of Waterflow, New Mexico in San Juan County. This facility is a stationary source and not allowed to relocate. (20.2.70.302.F NMAC)
- C. This renewal/modification consists of renewing of the Operating and Acid Rain Permits and includes modification authorized by NSR 0063M4 thru 63M6R1. No changes are being made to equipment or operating procedures as a result of the

Operating or Acid Rain applications. This description is for informational purposes only and is not enforceable.

- D. [Table 102.A](#) and [Table 102.B](#) show the total potential emissions from this facility for information only, not an enforceable condition, excluding insignificant or trivial activities.

Table 102.A: Total Potential Criteria Pollutant Emissions from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	24,710.1
Carbon Monoxide (CO)	39,427.0
Volatile Organic Compounds (VOC)*	249.0
Sulfur Dioxide (SO ₂)	16,043.0
Total Particulate Matter (TSP)	1,818.0
Particulate Matter less than 10 microns (PM ₁₀)	1,550.0

Table 102.B: Total Potential HAPs that exceed 0.5 tons per year

Pollutant	Emissions (tons per year)
Benzene	0.6
Manganese	0.74
Hydrochloric acid (HCl)	15.8
Hydrofluoric Acid; (Hydrogen fluoride)	48.1
Total HAP	74.6

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 0.5 tons per year are listed here.

A103 Facility: Applicable Regulations and Non-Applicable Regulations

- A. The permittee shall comply with all applicable sections of the requirements listed in [Table 103.A](#).

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Entire Facility	Unit No.
NSR Permit No: 0063-M6R1 (Per 20.2.72 NMAC)	X	X	
20.2.7 NMAC Excess Emissions	X	X	
20.2.14 NMAC Coal Burning Equipment – Particulate Emissions	X		E301, E302, E303, E304
20.2.31 NMAC Coal Burning Equipment – Sulfur Dioxide	X		E301, E302, E303, E304

Applicable Requirements	Federally Enforceable	Entire Facility	Unit No.
20.2.32 NMAC Coal Burning Equipment – Nitrogen Dioxide	X		E301, E302, E303, E304
20.2.61 NMAC Smoke and Visible Emissions	X		E602, E603, E604, E605, E606
20.2.70 NMAC Operating Permits	X	X	
20.2.71 NMAC Operating Permit Emission Fees	X	X	
20.2.72 NMAC Construction Permit	X	X	
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	X	
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	X	
20.2.77 NMAC New Source Performance	X		E301, E302, E303, E304, E803, E804, E805
40 CFR 50 National Ambient Air Quality Standards	X	X	
40 CFR 60, Subpart A, General Provisions	X		E301, E303, E304, E803, E804, E805
40 CFR 60 Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators	X		E301, E303, E304
40 CFR 60 Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants	X		E803, E804, S805
40 CFR 64 Compliance Assurance Monitoring	X		E301, E302, E303, E304
40 CFR 68 Chemical Accident Prevention	X		
40 CFR 72 Subparts B, D, and I – Acid Rain Permit Regulations	X		E301, E302, E303, E304
40 CFR 73 Subparts B, C, and D – Sulfur Dioxide Allowance System	X		E301, E302, E303, E304
40 CFR 75 Subparts A-G - Continuous Emission Monitoring	X		E301, E302, E303, E304
40 CFR 76 Acid Rain Nitrogen Oxides Emission Reduction Program	X		E301, E302, E303, E304
40 CFR 77 Excess Emissions	X		E301, E302, E303, E304
40 CFR 82 Subpart B – Protection of Stratospheric Ozone, Servicing of Motor Vehicles	X	X	
March 10, 2005 Consent Decree filed in the United States District Court, District of New Mexico	X		E301, E302, E303, E304
Demister Settlement Agreement	X		E301, E302, E303, E304

B. Table 103.B lists requirements that are **not** applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

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Table 103.B: Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
40 CFR 60 Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids		X	See note (2) below
40 CFR 60 Subpart Ka -Standards of Performance for Storage Vessels for Petroleum Liquids		X	See note (2) below

- (1) Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.
- (2) No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

C. Applicable requirements that give rise to emissions limits in this permit.

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Table 103.C: Applicable Requirements Giving Rise to Permit Emission Limits
(for information only, not an enforceable condition)

Emission Unit Nos.	Applicable Requirement	Description of Requirement
E301, E303, E304	40 CFR 60.42(a)(1)	PM Emission Limit
E301, E303, E304	40 CFR 60.42(a)(2)	Opacity Emission Limit
E301, E303, E304	40 CFR 60.43(a)(2)	SO ₂ Emission Limit
E301, E303, E304	40 CFR 60.44(a)(3)	NOx Emission Limit
E301, E303, E304	20.2.14.201.A NMAC	PM Emission Limit
E301, E303, E304	20.2.14.201.B NMAC	PM-2 Emission Limit
E301, E303, E304	20.2.31.109.B NMAC	SO ₂ Emission Limit
E301, E303, E304	20.2.32.109 NMAC	NOx Emission Limit
E302	20.2.14.202.A NMAC	PM Emission Limit
E302	20.2.14.202.B NMAC	PM-2 Emission Limit
E302	20.2.31.110.A NMAC	SO ₂ Control Efficiency Limit

Emission Unit Nos.	Applicable Requirement	Description of Requirement
E302	20.2.32.110.C NMAC	NOx Emission Limit
E301, E302, E303, E304	20.2.31.109.C NMAC	SO ₂ Emission Limits (Plant-Wide)
E301, E302, E303, E304	NSR No. 63-M6, Condition 2	Emission Limits for NO _x , SO ₂ , PM-10, TSP, CO, and VOC
E803	40 CFR 60.672(a)	PM and Opacity Emission Limits
E804, E805	40 CFR 60.672(b)	Opacity Emission Limit
E602, E603, E604, E605, E606	20.2.61.109 NMAC	Opacity Emission Limit
E101, E102, E103, E104, E201, E406, E407, E408, E409, E410, E411, E505, E506, E507, E508, E509, E510, E701, E702, E703, E704, E705, E706, E707, E801, E802	NSR No. 63-M6	Emission Limits for NO _x , SO ₂ , PM-10, TSP, CO, <u>or</u> VOC

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D. Units E301, E303, and E304 are subject to federal new source performance standards (NSPS) found in CFR Title 40, Part 60, Subpart A - General Provisions, and Subpart D and shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart D. (NSR Permit 63M6R1, Condition 1.d)

E. New Source Performance Standards (NSPS) found in 40 CFR 60, Subpart A - General Provisions, and Subpart OOO applies to certain pieces of equipment in the limestone handling system. Affected units shall comply with both the notification requirements in Subpart A and with the specific requirements of Subpart OOO. (NSR Permit 63M6R1, Condition 1.e)

F. Units E301, E302, E303, and E304 are subject to the applicable requirements of 20.2.14, 20.2.31, 20.2.32 NMAC. [Table 104.A](#) identifies whether the boiler unit is a new or existing unit including its vintage designation. (NSR Permit 63M6R1, Condition 1.f)

A104 Facility: Regulated Equipment

A. [Table 104.A](#) lists all of the process equipment authorized for this facility. Emission units that were identified as insignificant or trivial activities (as defined in 20.2.70.7 NMAC) and equipment not regulated pursuant to the Act are not included.

Table 104.A: Regulated Equipment list

Unit No. ¹	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
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Unit No. ¹	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
S301/E301	Unit 1 Coal Boiler Begin Commercial Operation 12/1976	Foster Wheeler	--	08-1266	--	3707 MM Btu/hr ⁴	Fabric Filter SO ₂ Scrubber
S302/E302	Unit 2 Coal Boiler Begin Commercial Operation 11/1973	Foster Wheeler	--	08-1266	--	3688 MM Btu/hr ⁴	Fabric Filter SO ₂ Scrubber
S303/E303	Unit 3 Coal Boiler Begin Commercial Operation 12/1979	Babcock & Wilcox	--	RB-544	--	5758 MM Btu/hr ⁴	Fabric Filter SO ₂ Scrubber
S304/E304	Unit 4 Coal Boiler Begin Commercial Operation 4/1982	Babcock & Wilcox	--	RB-545	--	5649 MM Btu/hr ⁴	Fabric Filter SO ₂ Scrubber
S508/E501	Unit 1 Duct Leaks	--	--	--	--	--	Good air pollution control practices
S509/E502	Unit 2 Duct Leaks						
S510/E503	Unit 3 Duct Leaks	--	--	--	--	--	
S511/E504	Unit 4 Duct Leaks	--	--	--	--	--	
S111/E101	Coal Pile A Maintenance	--	--	--	--	--	TBD
S112/E102	Coal Pile A Maintenance	--	--	--	--	--	TBD
S113/E103	Coal Pile A Maintenance	--	--	--	--	--	TBD
S114/E104	Coal Pile A Maintenance	--	--	--	--	--	TBD
S201/E202	Coal Silo Transfer Point	--	--	--	--	--	Enclosure
S203/E203	Coal Belt to Pulverizers transfer Point	--	--	--	--	--	Enclosure
S204/E201	Coal Pulverizers	Multiple	Multiple	Multiple	Multiple	8,200,000 tpy ³	Building Enclosure
S425/E406	Unit 1 Cooling Tower	Marley	Note 2	D52	6615-5-11	170,000 gpm	Drift Eliminators/Design

Unit No. ¹	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
S426/E407	Unit 2 Cooling Tower	Marley	Note 2	D52	6615-5-11	165,000 gpm	
S427/E408	Unit 3 Cooling Tower	Marley	Note 2	Model 2	644-12-333-75	220,000 gpm	
S428/E409	Unit 4 Cooling Tower	Marley	Note 2	Model 2	6616-12-113-80	227,500 gpm	
S429/E410	Aux #1 Cooling Tower	Marley	1978	600 series	TBD	5,000 gpm	
S430/E411	Aux #2 Cooling Tower	Marley	1978	TBD	TBD	30,000 gpm	
S518/E518	Unit 1 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S519/E519	Unit 2 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S512/E505	Unit 3 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S513/E506	Unit 4 Fly Ash Silo Vent	W.W. Sly	TBD	JM3586	TBD	TBD	Fabric Filter Baghouse
S514/E507	Unit 1 Fly Ash Silo Unloading	--	--	--	--	TBD	Moisture Control (Bulk Unloading)
S515/E508	Unit 2 Fly Ash Silo Unloading	--	--	--	--	TBD	
S516/E509	Unit 3 Fly Ash Silo Unloading	--	--	--	--	TBD	
S517/E510	Unit 4 Fly Ash Silo Unloading	--	--	--	--	TBD	
S738/E704	Front End Loader (Around Coal Piles)	--	--	--	--	--	Watering
S753/E707	Front End Loader (Around Gypsum Piles)	--	--	--	--	--	Watering
E702, E703, E704-B, and E706	Un-Paved Haul Roads	--	--	--	--	--	Watering

Unit No. ¹	Description	Manufacture	Manufacture Date	Model No.	Serial No.	Capacity	Control Equipment
E701, E705, and E708	Paved Road Emissions	--	--	--	--	--	Water Truck Street Sweeper
S804/E802	Lime Stone Pile Maintenance	--	--	--	--	--	TBD
E801	Limestone Truck Unloading	—	—	—	—	—	None
S806/E803	Limestone Silo loading	—	—	—	—	—	Baghouse
S901	Activated Carbon Silo	--	TBD	--	--	45,000 lb	Dedicated Baghouse (E901)
S902	Activated Carbon Silo	--	TBD	--	--	45,000 lb	Dedicated Baghouse (E902)
S903	Activated Carbon Silo	--	TBD	--	--	72,000 lb	Dedicated Baghouse (E903)
S904	Activated Carbon Silo	--	TBD	--	--	72,000 lb	Dedicated Baghouse (E904)

- 1 Unit number designations starting with an "S" indicate Source and "E" Designations indicate emissions points
- 2 The manufacture date for the boilers (Units E301 – E304), the boiler specific cooling towers (Units 406 – 409), and the coal pulverizers (Unit E201) is assumed to be the "begin commercial operations" date for the respective boilers.
- 3 The coal pulverizers have a capacity of 1,600,000 tons per year of coal for each emissions units E301 and E302. The coal pulverizers have a capacity of 2,500,000 tons per year of coal for each emissions units E303 and E304. These capacity values are rounded to the nearest 100,000 tons per year. These values are based on historical coal use, scaled up to 100 percent unit utilization (i.e 100 percent load at 8760 hours per year)."
- 4 The Btu/hr value listed in Table 1.1 Includes a 6% safety factor added to nominal rated capacity of the boilers existing at the time of permit issuance.

A105 Facility: Control Equipment

- A. [Table 104.A](#) lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

A106 Facility: Allowable Emissions

- A. The following table(s) list the emission units, and their allowable emission limits. ([40 CFR 50, Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC and NSR Permit 0063M6R1](#)).

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Table 106.A: Maximum Allowable Emission Rates for Units E301 (1), E302 (2), E303 (3), and E304 (4)

Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E302 E303 E304	CO	E301 – 3000 lb/hr E302 – 2000 lb/hr E303 – 2000 lb/hr E304 – 2000 lb/hr	Per Compliance Method	20.2.3 NMAC, 40 CFR 50, NSR No. 63-M2	Quarterly Testing

Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E302 E303 E304	NOx	E301 – 1,573.7 lb/hr E302 – 2,435.3 lb/hr E303 – 2,444.4 lb/hr E304 – 2,398.1 lb/hr	24-Hour Average	NSR No. 63-M2 20.2.32 NMAC,	CEMS
E301 E302 E303 E304	NOx	E301 – 4871 tons/yr E302 – 4844 tons/yr E303 – 7564 tons/yr E304 – 7424 tons/yr	Daily rolling 365-day Total	NSR No. 63-M2 20.2.32 NMAC,	CEMS
E301 E303 E304	NOx	0.70 lb/MMBtu	3-Hour Average, Rolled Hourly	40 CFR 60.44(a)(3)	CEMS
E302	NOx	0.70 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.32.110.C NMAC	CEMS
E301 E303 E304	NOx	0.45 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.32.109 NMAC	CEMS
E301 E302 E303 E304	NOx^{1,5}	0.30 lb/MMBtu	30 day rolling average⁵	0063-M4	CEMS & Process Records
E301 E302 E303 E304	Opacity ⁸	20%	6-Minute Average	40 CFR 60.42(a)(2); for E302-NSR 63M4 and Consent Decree	COMS
E301 E302 E303 E304	TSP ⁴ (Filterable)	E301 – 174.8 lb/hr E302 – 173.9 lb/hr E303 – 271.6 lb/hr E304 – 266.5 lb/hr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	TSP ⁴ (Filterable)	E301 – 765.8 tons/yr E302 – 761.9 tons/yr E303 – 1,189.6 tons/yr E304 – 1,167.1 tons/yr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	PM^{4,7} (Filterable)	0.015 lb/MMBtu	Per Compliance Method	0063-M4	Quarterly Testing
E301 E303 E304	PM ⁴ (Filterable)	0.1 lb/MMBtu	Per Compliance Method	40 CFR 60.42(a)(1)	Quarterly Testing
E301 E303 E304	PM ⁴ (Filterable)	0.05 lb/MMBtu	Per Compliance Method	20.2.14.201.A NMAC	Quarterly Testing
E302	PM ⁴ (Filterable)	0.05 lb/MMBtu	Per Compliance Method	20.2.14.202.A NMAC	Quarterly Testing
E301 E302 E303 E304	PM-10 ⁴ (Filterable)	E301 – 174.8 lb/hr E302 – 173.9 lb/hr E303 – 271.6 lb/hr E304 – 266.5 lb/hr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing

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Unit No.(s)	Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
E301 E302 E303 E304	PM-10 ⁴ (Filterable)	E301 – 765.8 tons/yr E302 – 761.9 tons/yr E303 – 1,189.6 tons/yr E304 – 1,167.1 tons/yr	Per Compliance Method	NSR No. 63-M2	Quarterly Testing
E301 E302 E303 E304	PM-2.5⁴ (Filterable)	E301 – 55.6 lb/hr E302 – 55.3 lb/hr E303 – 86.4 lb/hr E304 – 84.7 lb/hr	Per Compliance Method	0063-M6	Quarterly Testing
E301 E302 E303 E304	PM-2.5⁴ (Filterable)	E301 – 243.5 tons/yr E302 – 242.2 tons/yr E303 – 378.4 tons/yr E304 – 371.0 tons/yr	Per Compliance Method	0063-M6	Quarterly Testing
E301 E303 E304	PM-2 ⁴ (Filterable)	0.02 lb/MMBtu	Per Compliance Method	20.2.14.201.B NMAC	Note 2
E302	PM-2 ⁴ (Filterable)	0.04 lb/MMBtu	Per Compliance Method	20.2.14.202.B NMAC	Note 2
E301 E302 E303 E304	SO₂	90% removal	Annual Average	0063-M4	CEMS
E301 E302 E303 E304	SO₂ ⁶	0.250 lb/MMBtu	7-day block average	0063-M4	CEMS & Process Records
E301 E302 E303 E304	SO ₂	E301 – 3159 tpy E302 – 3143 tpy E303 – 4907 tpy E304 – 4814 tpy	Per Compliance Method	20.2.3 NMAC, 40 CFR 50	CEMS
E301 E303 E304	SO ₂	1.2 lb/MMBtu	3-Hour Average, Rolled Hourly	40 CFR 60.43(a)(2)	CEMS
E301 E303 E304	SO ₂	1.2 lb/MMBtu	3-Hour Average, Rolled Hourly	20.2.31.109.B NMAC	CEMS
E302	SO ₂	Minimum 72% Control	30-Day Average, Rolled Daily	20.2.31.110.A NMAC	CEMS
E301 E302 E303 E304	VOC	E301 – 11.1 lb/hr E302 – 11.1 lb/hr E303 – 17.3 lb/hr E304 – 17.0 lb/hr	Per Compliance Method	NSR No. 63-M2	Note 3

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- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂
- 2 PNM shall show compliance either the PM or PM₂ limits as required in 20.2.14 NMAC.
- 3 Test results that demonstrate compliance with CO emission limits shall also be considered to demonstrate compliance with VOC emission limits for the subject emission unit.
- 4 The particulate emission limits in this permit only include filterable particulate emissions. Future permitting actions shall change the allowable emission limits to include condensable emissions.
- 5 For purposes of calculating the thirty (30) day rolling average, NO_x emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.30 lb/MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler.

- ³ 6 The seven (7) day average emission rate of SO₂ at San Juan Units E301, E302, E303, and E304 shall not exceed 0.250 lb-SO₂/MMBtu for each unit, calculated as a block average as measured by SO₂ CEMS located downstream of the scrubber outlet and any scrubber by-pass return. For purposes of calculating the block average, SO₂ emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.250 lb./MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler.
- ⁴ 7 The PM average emission rate for each of Units E301, E302, E303, and E304 shall not exceed 0.015 lb-PM/MMBtu, as measured by EPA Reference Method 5 or 5i stack tests, conducted at least once each calendar quarter at times and conditions specified by the Department, and according to test protocols approved by the Department, but in all cases under conditions and in a manner no less stringent than described in EPA's 2004 Clean Air Act National Stack Testing Guidance.
- 8 The opacity limit for San Juan Units E301, E303, and E304 as required by 40 CFR 60.D and E301, E302, E303, and E304 as required by this permit shall be twenty (20) percent, averaged over any six (6) minute period except for one six (6) minute average per hour of up to twenty-seven (27) percent opacity. This limit shall apply at all times when air pollutants are being discharged into the atmosphere, unless PNM demonstrates that any excess opacity reading: (a) was caused by a startup, shutdown, malfunction, or emergency, or (b) occurred when both the boiler and all fans that move flue gas in the unit were off. Load changes, poor coal quality, air heater cleaning, sootblowing, and high ash hoppers shall not be used as a defense any excess opacity reading. Opacity shall be measured in the duct or, if approved by EPA, after the outlet of the baghouse and corrected to stack exit. (CD 9a)

B. Table 3.2.1 contains the maximum allowable emission rates for Units E301, E302, E303, and E304 combined. (NSR 63M6R1, Condition 2.b)

Table 106.B, Maximum Allowable Emission Rates for Units E301-E304 Combined

Pollutant	Maximum Allowable Emission Rate	Averaging Period	Applicable Requirement	Compliance Method
NO _x ¹	9,000 lb/hr	24-Hour Average, Rolled Hourly	NSR No. 63-M2, 40 CFR Part 50	CEMS
SO ₂	13,000 lb/hr	3-Hour Average, Rolled Hourly	20.2.31.109.C NMAC	CEMS
SO ₂	0.55 lb/MMBtu	30-Day Average, Rolled Daily	20.2.31.109.C NMAC	CEMS & Process Records
SO ₂	0.46 lb/MMBtu	Annual Average	NSR No. 63-M2	CEMS & Process Records

¹ Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂

C. Table 106.C list the allowable emissions from duct leaks. Compliance shall be determined by implementation of a duct leak management program. (NSR 63M6R1, Condition 2.d)

Table 106.C, Maximum Allowable Emission Rates for Duct Leaks

Emission Unit No.	Maximum Allowable Emission Rates in Pounds per Hour (pph) and Tons per Year (tpy)									
	TSP		PM-10		NO _x		CO		SO ₂	
	pph	tpy	Pph	tpy	pph	tpy	pph	tpy	pph	tpy
E501	11.3	45.0	4.5	18.1	0.3	0.8	0.5	2.0	1.1	4.5

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Table 106.C, Maximum Allowable Emissio... [1]

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Emission Unit No.	Maximum Allowable Emission Rates in Pounds per Hour (pph) and Tons per Year (tpy)									
	TSP		PM-10		NOx		CO		SO ₂	
	pph	tpy	Pph	tpy	pph	tpy	pph	tpy	pph	tpy
E502	12.4	50.0	4.9	20.0	0.4	0.8	0.4	1.5	1.2	4.9
E503	12.6	50.4	5.0	20.1	--	0.8	0.2	1.0	1.3	5.0
E504	14.5	58.3	5.8	23.3	0.3	1.0	0.3	1.1	1.5	5.8

D. [Table 106.E](#) lists the allowable emission limits for non-boiler emission units. The emissions from any individual piece of equipment shall not exceed the limits listed in the table. (NSR 63M6R1, Condition 2.e)

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Table 106.D, Maximum Allowable Emission Rates for Non-Boiler Emission Units

Emission Unit No.	Maximum Allowable Emission Rates in Pounds per Hour (pph) and Tons per Year (tpy)			
	TSP		PM-10	
	pph	tpy	pph	tpy
E101	1.6	7.0	--	1.6
E102	1.6	7.0	--	1.6
E103	1.6	7.0	--	1.6
E104	1.6	7.0	--	1.6
E201	7.3	32.0	2.8	12.3
E202	--	0.6	--	--
E203	--	0.6	--	--
E406	9.4	41.0	9.4	41.0
E407	9.1	39.8	9.1	39.8
E408	9.1	39.8	9.1	39.8
E409	12.5	54.9	12.5	54.9
E410	--	1.0	--	1.0
E411	1.3	5.8	1.3	5.8
E505	--	0.5	--	--
E506	--	0.5	--	--
E507	0.6	2.4	--	1.1
E508	0.6	2.4	--	1.1
E509	0.9	3.7	--	1.8
E510	0.8	3.7	--	1.7
E518	--	--	--	--
E519	--	--	--	--
E704A	0.9	3.9	--	1.2
E707	2.3	10.3	0.8	3.3
Paved Roads (E701, E705, E708)	12.2	53.5	2.4	10.4
Unpaved Roads (E702, E703, E704B, E706)	9.0	39.5	2.7	6.8

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Emission Unit No.	Maximum Allowable Emission Rates in Pounds per Hour (pph) and Tons per Year (tpy)			
	TSP		PM-10	
	pph	tpy	pph	tpy
E801	0.7	3.1	--	1.5
E802	2.4	10.4	--	1.6
E803	--	--	--	--
S901	--	--	--	--
S902	--	--	--	--
S903	--	--	--	--
S904	--	--	--	--

Note: E704A is the front end loader emissions from travel around the coal piles. E704Bis front end loader emissions on unpaved roads.

-- indicates that the emissions are less than 1.0 pph or 1.0 tpy and emission limits are not required for this permit.

E. Unless otherwise required by this permit or another applicable regulation, compliance with the NO_x emission limits shall be determined on a unit-specific basis using data from NO_x CEMS that have been installed, calibrated, and operated in accordance with 40 CFR. 75 and any other applicable requirement. (NSR 63M6R1, Condition 2.f)

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F. Unless otherwise required by this permit or another applicable regulation, compliance with the SO₂ emission limits shall be determined on a unit-specific basis using data from SO₂ CEMS that have been installed, calibrated, and operated in accordance with 40 CFR 75 and any other applicable requirement. (NSR 63M6R1, Condition 2.g)

G. Each affected facility as defined in 40 CFR 60 Subpart OOO of the limestone handling system, including the limestone silo, shall meet the standards for particulate matter specified in 40 CFR 60.672. (NSR 63M6R1, Condition 2.h)

H. In accordance with 20.2.61.109. NMAC, the owner or operator of stationary combustion equipment shall not permit, cause, suffer or allow visible emissions from the stationary combustion equipment to equal or exceed an opacity of 20 percent; provided, however, stationary combustion equipment which is regulated by Parts 20.2.10 NMAC through 20.2.18 NMAC, 20.2.37 NMAC, and 20.2.42 NMAC, and any other Part of Chapter 2 which specifically limits particulate emissions is exempted from this Part. The emergency generators are subject to 20.2.61.109 NMAC. (NSR 63M6R1, Condition 2.i)

I. The activated carbon silo baghouses, shall be designed and operated so there are no visible emissions. (NSR 63M6R1, Condition 2.k)

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- (1) For mercury control, the operating procedures needed to maximize mercury removal per the consent decree requirements are not yet available to explicitly incorporate in this permit renewal. Once PNM, NMED and the Plaintiffs agree on the maximal mercury removal rate and procedure, then this permit will re-open or

modified to incorporate limits and/or conditions to meet consent decree requirements. (CD 9d)

J. Emission limits totals are used solely for assessing annual fees in accordance with 20.2.71 NMAC. SJGS has many limits for each pollutant. This table shows the most stringent of these limits for each pollutant for which the annual fees will be based. Only pollutants for which we can access fees are shown. (B103A)

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Table 106.J: Emissions (tons per year) total for annual fees use

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Unit	¹ NO _x	² CO	³ VOC	⁴ SO ₂	⁵ PM
E301	4, 871	13,140	48.7	3,159	243.5
E302	4,844	8,760	48.5	3,143	242.2
E303	7,564	8,760	75.8	4,907	378.4
E304	7,424	8,760	74.5	4,814	371.0
Misc					⁶ 581.1
Totals*	24,703	39,420		16,023	
Used for fees	6,000	6,000	247.5	6000	1,816.4

* Amounts are capped at 6,000 tpy per pollutant by regulation (20.2.71.111.C(4) NMAC).

¹ Units 1,2,3,4: Tons per year NO_x limits obtained by scaling up 0.3 lbs/MMBtu 30-day average (CD 9cii; Table 106.A).

² Units 1,2,3,4: Tons per year CO limits obtained by scaling up lbs/hr limits (Table 106.A).

³ Units 1,2,3,4: VOC totals based on average coal Btu content and revised heat input values (Application dated January 2009).

⁴ Units 1,2,3,4: 90% SO₂ control annual average (CD 9cii; Table 106.A, Application dated January 2009).

⁵ Units 1,2,3,4: Tons per year PM limits obtained by scaling up 0.015 lbs/MMBtu (CD 9cii; Table 106.A).

⁶ Represents sum of PM totals from Tables 106.C and 106.D.

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A107 Facility Allowable Startup, Shutdown, and Maintenance (SSM) Emissions

A. SJGS Units have multiple NO_x limits for different averaging times. Some limits are expressed in lbs/mmBtu rather than lbs/hr. Units 1, 3 and 4 have a 3-hr average limit of 0.45 lbs/mmBtu. During SSM this limit may be exceeded for each of these units. The maximum NO_x emission rate during SSM for these units is 0.7 lbs/mmBtu. The Unit 2 3-hr NO_x limit is 0.7 lbs/mmBtu and Unit 2 NO_x emissions are not expected to exceed this rate during SSM. The permittee shall maintain records in accordance with Condition B109.E. SJGS shall comply with all other emission limits established for steady state operations even during SSM events.

A108 Facility: Hours of Operation

- A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting requirements are required to demonstrate compliance with continuous hours of operation.

A109 Facility: Reporting Schedules

- A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month period starting on 08/01/1998.
- B. The Annual Compliance Certification Report is due within 30 days following the end of every 12 month reporting period starting on the first day of January.
- C. The quarterly reports required by NSR Permit 0063M6R1 and quarterly reportable items required by this permit shall be submitted quarterly. The reports will be maintained on-site and summarized in the semi-annual reports.

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A110 Facility: Fuel Sulfur Requirements (not required)

A111 Facility: 20.2.61 NMAC Opacity (see specific conditions)

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EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry - Not Required

CONSTRUCTION INDUSTRY

A300 Construction Industry – Not Required

POWER GENERATION INDUSTRY

A400 Power Generation Industry

This section has common equipment related to most Electric Service Operations (SIC-4911).

A. This facility and Units E301, E302, E303, and E304 (boilers) are subject to and shall have complied with the requirements of 40 CFR Part 72 by applying for and obtaining an Acid Rain Permit, P062AR2 and is a part of this operating permit. The requirements of Section B116 shall apply.

B. Acid Rain Program Monitoring

Requirement: : Emission Units E301, E302, E303, and E304 (boilers) are subject to and shall comply with the requirements of 40 CFR Part 75 for installation, calibration, maintenance and operation of NOx and SO ₂ continuous emissions monitoring systems (NOx and SO ₂ CEMS) and for continuous opacity monitoring systems (COMS). (NSR Permit 63M6R1, Condition 1.t, and revised)
Monitoring: The permittee shall comply with the requirements at 40 CFR 75.12(a) and 75.12(b) for continuous monitoring of NOx emissions; with the requirements at 40 CFR 75.11(a) and 75.11(b)(2) for continuous monitoring of SO ₂ emissions; with the requirements at 40 CFR 75.14(a) for continuous monitoring of opacity; and with the requirements at 40 CFR 75.13(b) and 75.13(c) for continuous monitoring of CO ₂ emissions.
Recordkeeping: The permittee shall comply with the requirements of 40 CFR 75.50(d) for recordkeeping of NOx emissions; with the requirements of 40 CFR 75.50(c) for recordkeeping of SO ₂ emissions; with the requirements of 40 CFR 75.50(f) for recordkeeping of opacity; with the requirements of 40 CFR 75.50(e)(2) for recordkeeping of CO ₂ emissions; with the requirements of 40 CFR 50 for general recordkeeping, including the requirements at 40 CFR 50.52 for certification, quality assurance, and quality control; with the requirements of 40 CFR 75.51(b) for recordkeeping relating to add-on controls using site-specific parametric monitoring for substitute data; and in accordance with Section B109 of this permit.
Reporting: In accordance with 40 CFR 75.

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C. Mercury CEMS

Requirement: The permittee shall install, maintain, and operate mercury CEMS in accordance with the manufacturer's recommendations. (NSR 63M6R1, Condition 1.y)
Monitoring: The permittee shall continually monitor the mercury emissions using CEMS that are installed and maintained in accordance with the CEMS manufacturer's recommendations. (NSR 63M6R1, Condition 3.m)
Recordkeeping: In accordance with Section B109, the permittee shall keep records of the mercury CEMS outputs, calculations, and any CEMS maintenance activity necessary to show accurate and continual mercury emission rates were recorded. (NSR 63M6R1, Condition 4.s).
Reporting: An annual evaluation of the mercury CEMS shall be performed and submitted to the NMED within 30 days after January 1 of each year.

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D. PNM shall maintain, calibrate, and operate CEMS at San Juan Units E301, E303, and E304 to measure accurately and continuously opacity and the emissions of SO₂, NOx, and the exhaust flow rate from each unit in full compliance with the requirements of 40 CFR Parts 60 and 75, including requirements for heat input rate measurements. Although Unit 302 is not an affected unit for purposes of NSPS 40 CFR 60, Subpart D, PNM shall maintain, calibrate, and operate CEMS at San Juan Unit E302 to measure continuously opacity and the emissions of SO₂, NOx, and the exhaust flow rate from each unit in accordance with the requirements of 40 CFR

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Parts 60 and 75, including requirements for heat input rate measurements. (NSR 63M6R1, Condition 5.g)

A401 Turbines - Not Required

A402 Boilers

A. Units E301, E302, E303, and E304

<p>Requirement: Each boiler shall be equipped and operated with a baghouse, to meet the emission limits, except as otherwise allowed under the applicable provisions of 20.2.7 NMAC and 40 CFR 60 Subpart A (E301, E303, and E304 only). In addition, Control Devices associated with Emission Units E301, E303, and E304 are subject to the requirements of 40 CFR 60.11(d). Each baghouse associated with the boilers shall be maintained and operated in accordance with good air pollution control practices for minimizing emissions. Individual boilers shall only be operated when its associated baghouse is achieving a control efficiency sufficient to ensure compliance with all applicable particulate emission limits listed in this permit. (NSR 63M6R1, Condition 1.p)</p>	<p>JKimbrell 7/22/10 1:25 PM Deleted: in accordance with the schedule in condition A106.J</p>
<p>Monitoring: For baghouses associated with Units E301, E302, E303, and E304, PNM shall record the pressure drop across each baghouse with a continuous monitoring device. The continuous monitoring device shall be designed with an alarm that records and signals to the operator any excursion outside the normal operating range of the baghouse. The normal operating range of the baghouse shall be determined by the manufacture or another Department approved method. (NSR 63M6R1, Condition 3.e and 4.e)</p>	
<p>Recordkeeping: <u>In accordance with Section B109, the pressure drop for each baghouse will be recorded hourly and these records will be kept on site for review.</u></p>	<p>JKimbrell 7/22/10 1:30 PM Deleted: In accordance with Section B109 of this permit.</p>
<p>Reporting: <u>No reporting required in accordance with Section B110.J of this permit.</u></p>	<p>JKimbrell 7/22/10 1:31 PM Deleted: I</p>

B. CAM Monitoring, Units E301, E302, E303, and E304

<p>Requirement: CAM Rule Corrective Action Requirements:</p>	
<p><u>(1) The units are pollutant specific emission units for SO₂, NO_x and PM, and are subject to and shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the requirements of 40 CFR 64.7(d) for corrective actions. Each unit has CEMS for SO₂ and NO_x which are required under acid rain regulations and, therefore, exempt SO₂ and NO_x from CAM requirements.</u></p>	<p>JKimbrell 7/26/10 8:17 AM Deleted: Emissions</p>
<p><u>(2) As a requirement of this permit the permittee is subject to and shall comply with the corrective provisions of the PM CAM Plan dated July 2010 submitted in the application for this permit and attached to this permit, except that the trigger points for corrective actions and excursions shall be those specified in Table 402.B.</u></p>	<p>JKimbrell 7/26/10 8:17 AM Deleted: U</p>
<p><u>(3) In accordance with 40 CFR 64.6(b), the permittee shall submit COM data 12-months after the issuance of this permit to show that the indicator range of 6% for Opacity has been set sufficiently to satisfy the requirements of 40 CFR 64 and to confirm the appropriateness of the indicator.</u></p>	<p>JKimbrell 7/26/10 8:17 AM Deleted: E301, E302, E303, and E304</p>
<p><u>(40 CFR 64 and 20.2.70.302.A(7) NMAC)</u></p>	<p>JKimbrell 7/26/10 8:18 AM Deleted: , TSP, and PM₁₀</p>
<p>Monitoring:</p>	<p>JKimbrell 7/26/10 8:23 AM Deleted: C</p>
<p>(1) The permittee shall continuously monitor opacity of the units in accordance with the specifications of 40 CFR Part 60, Appendix B for continuous opacity monitors (COMs). (40</p>	<p>JKimbrell 7/26/10 9:25 AM Deleted: This condition is imposed pursuant to</p>
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CFR 64.6(c)(1)(ii) and 20.2.70.302.A(7)).

(2) The COMs shall collect at least one duct opacity reading every 10 seconds, except as allowed by (4) below (40 CFR 64.6(c)(1)(iii), 40 CFR 64.3(b)(4), 40 CFR 64.3(d)(3), and 20.2.70.302.A(7)).

(3) The COMs shall be maintained at all times, including but not limited to maintaining the spare parts necessary for routine repairs (40 CFR 64.6(c)(3) and 40 CFR 64.7(b)).

(4) Except for applicable monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct the opacity monitoring at all times that each unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used to meet the requirements of this permit that implement the requirements of 40 CFR Part 64. All data collected during all other periods shall be used in assessing the operation of the control devices for those emission units (40 CFR 64.6(c)(3), 40 CFR 64.7(c)).

(5) For the purposes of terms and conditions of this permit that implement the requirements of 40 CFR Part 64, a monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR 64.6(c) and 40 CFR 64.7(c)).

CAM Indicators:

(6) Visible emissions (opacity) as measured by COM systems meeting the 40 CFR60 Performance Specification One and located in the fabric filter outlet duct from each unit (per an Alternative Monitoring Plan submitted to EPA).

(7) Differential pressure drop across the fabric filter on each unit.

(8) By-pass damper position (open/closed) indicator.

Recordkeeping: The Permittee shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the recordkeeping requirements of 40 CFR 64.9(b). (40 CFR 64 and 20.2.70.302.A(7) NMAC)

Reporting: The Permittee shall comply with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, including the reporting requirements of 40 CFR 64.9(a). (40 CFR 64 and 20.2.70.302.A(7))

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Deleted: If the three-hour average opacity (as determined by the COMS data) exceeds the values specified in Table 402.C, an excursion will be deemed to have occurred. The three-hour averages will be calculated based on discrete three hour blocks (non-rolling) with the first block beginning at 00:00 hours of each day. A three-hour average will not be calculated if fuel is not being combusted in the boiler for a minimum of 30 minutes during the three-hour averaging period. Excursions shall be recorded and reported as a deviation (40 CFR64.6 (c) (2), 20.2.70.302.A(7)).

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Table 402.B, CAM Indicator Trigger Points for Corrective Actions and Excursions

Indicator	Trigger Point ¹
<u>1</u>	<u>An excursion is defined as a condition when the average opacity exceeds six (6) percent for any consecutive 3-hr period.</u>
<u>2</u>	<u>An excursion is defined as a condition when the fabric filter average differential pressure exceeds 10 inches water column (w.c) for any consecutive 3-hr period.</u>
<u>3</u>	<u>An excursion is defined as a condition when the by-pass damper is in the open position any time when the boiler is in operation.</u>

¹The permittee shall use the permit modification procedures of 20.2.70.404.B NMAC to change the CAM Plan.

C. Duct Leak Management Program on Units E501, E502, E503, and E504

<p>Requirement: The Duct leak management program shall be conducted in accordance with good air pollution control practices for minimizing emission. All remaining combustion gasses shall be exhausted through the primary stack of each unit. Compliance with this requirement shall be determined using data generated by the monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 1.s, <u>revised</u>)</p> <p><u>The EJMP shall include:</u></p> <ul style="list-style-type: none"> a. <u>A written procedure that identifies expansion joint inspection procedures, inspection points, inspection locations, inspection frequency and recordkeeping procedures,</u> b. <u>Identification of measures and time taken to mitigate (minimize) and repair leaks including immediate and long-term corrective actions,</u> c. <u>Quarterly assessment and evaluation of the EJMP covering the ability of the EJMP to detect and identify leaks, potential preventive maintenance measures identified to prevent or minimize leaks, and assessment of effectiveness of measures taken to minimize leaks.</u>
<p>Monitoring: Monitor performance of the Expansion Joint Maintenance Program (EJMP) to ensure that the program meets the requirements of this permit. At a minimum, this quarterly monitoring shall include an assessment of the program's performance in meeting the requirements above, including an estimate of the actual area of duct leaks present on the subject emission units.</p>
<p>Recordkeeping: <u>Records of the EJMP practices, quarterly inspections, and quarterly assessment of the program's performance shall be maintained on site. (NSR 63M6R1, Condition 4.n, revised)</u></p>
<p>Reporting: <u>The quarterly assessment of the program's performance shall be reported quarterly. The initial EJMP practices document shall be submitted for Department review within 60 days after the issuance of this permit and within 60 days of each subsequent revision.</u></p>

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D. Limestone Forced Oxidation (LSFO) Scrubber Operations

<p>Requirement: The boilers (E301, E302, E303, and E304) shall be equipped and operated with limestone scrubbers. PNM shall not exceed the emission limits. To the extent necessary to meet the SO₂ emission limits and the SO₂ control efficiency requirements of this permit (Table 106.C), PNM shall add dibasic acid to the limestone slurry feed of each scrubber. The limestone scrubbers (E301, E302, E303, and E304) shall be maintained and operated in accordance with good air pollution control practices for minimizing emissions, except as otherwise allowed under the applicable provisions of 20.2.7 NMAC and 40 CFR 60 Subpart A (E301, E302, and E304 only). Compliance with these requirements shall be determined using data generated and by Department inspections of the units. (NSR 63M6R1, Condition 1.r)</p>
<p>Monitoring: Control Devices C09, C11, C13, and C15, associated with Emissions Units E301, E302, E303, and E304, respectively, are subject to monitoring for good air pollution control practices and proper operation and maintenance. This monitoring shall consist of keep monthly records of the performance of maintenance and repair activities on these control devices.</p>
<p>Recordkeeping: In accordance with Section B109, <u>records of performance on maintenance and repair activities shall be kept on site for review.</u></p>

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E. Heat Input

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Requirement: Heat input to these boilers shall not increase as a result of installation of the low-NOx burners. Compliance with this condition shall be provided upon request of the Department. An increase in heat input solely due to an increase in demand is authorized. (NSR 63M6R1, Condition 1.u)

Monitoring:
(1) For each boiler, the 24-hour heat input value shall be calculated by multiplying the 24-hour coal flow rate with the 7-day rolling average Btu content of the coal. The 7-day rolling average Btu content of the coal shall be derived from as delivered coal sample analysis. In the event no coal is delivered for 7 or more days, the last 7-day rolling average will be used. (NSR 63M6R1, Condition 4.o)
(2) PNM shall keep records of the "as-delivered" heat content of the coal. The heat content of the coal shall be analyzed using an appropriate ASTM method, in accordance with the requirements of the coal contract. (NSR 63M6R1, Condition 4.p)
(3) For each boiler, the 365-day rolling total heat input shall be calculated as a summation of the 24-hour heat input value calculated. (NSR 63M6R1, Condition 4.q)

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Deleted: (4) For the first twelve (12) months of operation after the low-NOx burners are installed, for each Unit, PNM shall maintain records detailing the operational parameters implemented to achieve the NOx emission limits. (NSR 63M6R1, Condition 4.r)

Recordkeeping: In accordance with Section B109, records of the "as delivered" heat content of the coal and the 365 day rolling total heat input calculations shall be maintained.

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Reporting: No reporting required in accordance with Section B110.J of this permit. Upon written request by the Department, PNM shall summarize and report the 365-day rolling total heat input values calculated in (1) above. (NSR 63M6R1, Condition 5.c)

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F. Continuous Opacity Monitors

Requirement:

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- (1) Units E301, E303, and E304 are subject to 40 CFR 60 Subpart D and PNM shall operate the COMs for units E301, E303, and E304 as required in 40 CFR 60 Subpart D.
- (2) Although Unit 302 is not an affected unit for purposes of NSPS 40 CFR 60, Subpart D, PNM shall install, calibrate, maintain, and operate COMs on Unit E302 per the procedures specified in 40 CFR 60 Subpart D. The COMs for Unit E302 shall be installed in a location comparable to the COM location of Units E301, E303, and E304, unless otherwise approved by the Department. (NSR Permit 63M6R1, Condition 3.c)
- (3) For units E301, E302, E303, and E304 the permittee shall determine compliance with the opacity limits of the permit on a continuous basis, using data from the current COMS or an EPA approved COMs and an alternative location. All COMs shall be certified or recertified per the procedures in 40 CFR Part 60. (NSR Permit 63M6R1, Condition 3.b)

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Monitoring: For units E301, E302, E303, and E304 the permittee shall determine compliance with the opacity limits of the permit on a continuous basis, using data from the current COMS or an EPA approved COMs and an alternative location.

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Recordkeeping: Records of opacity readings and QA/QC events will be maintained and records of compliance with applicable recordkeeping requirements of 40 CFR 60, Subparts A and D.

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Reporting: In accordance with applicable reporting requirements of 40 CFR Part 60,

Subparts A and D.

G. 20.2.31 NMAC (Units E301, E302, E303, and E304)

Requirement: The units are subject to and shall comply with the requirements of 20.2.31.112 NMAC for SO₂ continuous emissions monitoring (CEMS).
Monitoring: SO₂ continuous emissions monitoring (CEMS).
Recordkeeping: In accordance with Section B109 of this permit and compliance with applicable recordkeeping requirements of 20.2.31.113 NMAC.
Reporting: No reporting is required in accordance with Section B110.J of this permit.

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H. Periodic Stack Test For Units E301, E302, E303, E304, and E803

Requirement: Units E301, E302, E303, and E304 (boilers) are subject to periodic compliance testing for PM, TSP, PM₁₀, PM_{2.5}, and CO using stack tests and Emission Unit E803 is subject to periodic compliance testing for PM using stack tests. The tests for PM, TSP, PM₁₀, and PM_{2.5} on Emission Units E301, E302, E303, and E304 (boilers) shall be performed quarterly. The tests for CO on Emission Units E301, E302, E303, and E304 (boilers) shall be performed quarterly. The tests on Emission Unit E803 shall be performed at the discretion of the Department. (NSR 63M6R1, Condition 6.b-6.f)
Monitoring: The permittee shall perform quarterly tests and keep records of the periodic emissions tests in accordance with Table 402.A and Section B111 of this permit.
Recordkeeping: In accordance with Sections B109 and B111 of this permit.
Reporting: In accordance with Sections B110 and B111 of this permit.

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Table 402.H: Quarterly testing Requirements

Pollutant	Reference Method
CO ¹	Methods 1-4 and 10
PM (TSP, PM ₁₀ , PM _{2.5}) ^{2,3,4,5,6}	Method 1-5, 5i

¹Test results that demonstrate compliance with CO emission limits shall also be considered to demonstrate compliance with VOC emission limits for the subject emission unit.

²PNM may use Method 5 or 5i testing to demonstrate compliance with the PM₁₀ and PM_{2.5} standards.

³PM₁₀ and PM_{2.5} particulate emissions include condensable particulates. Particulate testing shall include testing for condensable emissions when appropriate. Condensable testing is waived until an appropriate method is established by the USEPA.

⁴Once every 5th calendar quarter, PNM shall conduct compliance testing to determine actual emissions for PM₁₀ and PM_{2.5} (if a test method has been established) from each unit. The initial test shall be conducted prior to January 1, 2010, and different units may be tested during different calendar quarters. Testing for actual emissions is waived if an appropriate test method has not been established by USEPA. If testing is waived beyond January 1, 2010, the test shall be performed within 6-months of being notified by the Department of an available EPA method test or within 1-year of the EPA method test becoming available, whichever is sooner.

⁵PM₁₀ testing is waived until an appropriate test method is established by the USEPA.

⁶PM_{2.5} testing is waived until an appropriate test method is established by the USEPA.

I. Demister Operations

Requirement: Not Later than November 2011, PNM shall install pressure monitoring systems across the demister elements associated with all of the scrubber modules. The monitoring systems shall have the accuracy, reliability and quality to determine whether the demisters are operating below a maximum pressure drop of 0.3 inches W.C. as determined from Figure 4.4 of the Demister Report that is associated with the 14 fps maximum velocity of the demister

<p>based on the stack continuous monitors. (Demister Settlement Agreement, Paragraph 21.j)</p> <p>(1) Each demister will be cleaned with "clean wash water sprays" when the pressure drop equals or exceeds 0.3.</p> <p>(2) During plant outages, manual cleaning to remove stubborn deposits as noted during normal inspections.</p> <p>Monitoring:</p> <p>(1) PNM shall monitor hourly the pressure drop across each demister from a continuous monitoring device. The continuous monitoring device shall be designed with an alarm that records and signals to the operator any excursion equal to or above 0.3.</p> <p>(2) PNM shall inspect the demisters based on manufacturers' recommendations for deposit which are not cleaned by the clean wash water spraying.</p> <p>Recordkeeping:</p> <p>(1) PNM shall record hourly the pressure drop across each demister.</p> <p>(2) Record the time and dates of all excursion equal to or above 0.3.</p> <p>(3) Record the corrective action taken to return the demister back to normal operation.</p> <p>(4) Record the findings from the demister inspections.</p> <p>(5) Record when manual cleaning is performed.</p> <p>Reporting: No reporting is required in accordance with Section B110.J of this permit.</p>
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<p>J. 40 CFR 60, Subpart D (Units E301, E303, and E304)</p> <p>Requirement: The units are subject to 40 CFR 60, Subpart D and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart D.</p> <p>Monitoring: The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 60, Subpart D.</p> <p>Recordkeeping: Records of compliance with applicable recordkeeping requirements of 40 CFR Part 60, Subparts A and D.</p> <p>Reporting: In accordance with applicable reporting requirements of 40 CFR Part 60, Subparts A and D.</p>

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<p>K. Coal Pulverizer Unit E201</p> <p>Requirement: The coal pulverizers (E201) shall be entirely enclosed in a structure that is maintained and operated in accordance with good air pollution control practices in order to minimize particulate emissions. (NSR 63M6R1, Condition 1.k)</p> <p>Monitoring: Annual operational inspection, no less than once per calendar year, PNM shall inspect the coal pulverizers to insure they meet the requirements. (NSR 63M6R1, Condition 3.g)</p> <p>Recordkeeping: In accordance with Section B109, PNM shall record the results of the inspections for the coal pulverizes. (NSR 63M6R1, Condition 4.i).</p> <p>Reporting: No reporting required in accordance with Section B110.J of this permit.</p>
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A403 Engines - Not Required

A404 Heaters - Not Required

A405 Cooling Towers

A. Operational Requirements for Units E406, E407, E408, E409, E410, and E411

<p>Requirement: Cooling towers shall be maintained and operated according to manufacturer’s recommendations and good engineering practices, and the circulating water rate, total dissolved solids (TDS) content of that water, and the drift rate for the units shall not exceed the values specified in Table 405.A below. Compliance with these limits shall be determined using data generated by the monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 2.j)</p>
<p>Monitoring: PNM shall measure the TDS concentration of each cooling tower no less than once each calendar quarter. (NSR 63M6R1, Condition 3.k)</p>
<p>Recordkeeping: <u>In accordance with Section B109, no</u> less than once each calendar quarter, the permittee shall record the TDS concentration of each cooling tower. The permittee shall then calculate <u>and record</u> the individual cooling tower <u>PM</u> emissions <u>quarterly</u>, based on the maximum capacity of the circulating water pump(s) for each unit, the actual TDS content, and the units specific drift rate. (NSR 63M6R1, Condition 4.m).</p>
<p>Reporting: <u>No reporting required in</u> accordance with Section B110.<u>J</u> of this permit.</p>

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Table 405.A, Circulating Rate, TDS, and Drift Rate Operational Limits for Cooling Towers

Emission Unit No.	Circulating Water Rate	TDS Content	Drift Rate
E406	170,000 gallons/minute	0.0459 lb/gallon	0.002%
E407	165,000 gallons/minute	0.0459 lb/gallon	0.002%
E408	220,000 gallons/minute	0.0459 lb/gallon	0.0015%
E409	227,500 gallons/minute	0.0459 lb/gallon	0.002%
E410	5,000 gallons/minute	0.03756 lb/gallon	0.002%
E411	30,000 gallons/minute	0.0292 lb/gallon	0.002%

A406 Haul Roads/Storage piles (Coal-Fired Plants)

A. Road Area Operational Requirements Units E701, E702, E703, E704, E705, E706, and E707

<p>Requirement: Road areas shall comply with the operational requirements specified in Table</p>

406.A. Compliance is demonstrated by monitoring and by Department inspections of the units. (NSR 63M6R1, Condition 1.i)

Monitoring: The permittee shall monitor emissions by maintaining a log/records of the times and location of water application, the times and location of sweeping, amount of water applied to the haul road, occurrences of visual inspections and by performing weekly visual inspections of the road area to determine that emissions are minimized. (NSR 63M6R1, Condition 4.c)

Recordkeeping: In accordance with Section B109, [the records will be maintained on site for review](#).

Reporting: [No reporting required in](#) accordance with Section B110.J of this permit.

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Table 406.A, Operational Requirements for Road Areas

Emission Unit No.	Operational Requirements
E701, E705, and E708	Unit shall be paved, and swept and watered as necessary, to minimize emissions of TSP and PM ₁₀
E702, E703, E704, E706, and E707	Unit shall be watered as necessary to minimize emissions of TSP and PM ₁₀

B. Facility-Wide Raw Material Limits

Requirement: The facility shall not process more than the quantities of raw materials specified in Table 406.B. Compliance with this limit shall be determined using data generated here. (NSR 63M6R1, Condition 1.n, and revised)

Monitoring: The permittee shall monitor and record [facility-wide raw material usage on a quarterly](#) basis. PNM shall monitor the quantities of coal, diesel fuel, and limestone processed. (NSR 63M6R1, Condition 3.j) For each 24-hour period, the permittee shall monitor the coal flows in each boiler. (NSR 63M6R1, Condition 3.l)

Recordkeeping: In accordance with Section B109, PNM shall maintain [quarterly and annual-to-date](#) records of the quantities of coal, diesel fuel, and limestone processed. (NSR 63M6R1, Condition 4.l, revised)

Reporting: [No reporting required in](#) accordance with Section B110.J of this permit.

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Table 406.B, Facility-Wide Operational Limits on Raw Materials

Material	Annual Limit
Coal	8,200,000 tons
No. 2 Diesel Fuel Oil	2,912,500 gallons
Limestone	227,000 tons

C. Good Air Pollution Control Practices

Requirement: Coal pile maintenance (E101, E102, E103, and E104), fly ash silo unloading to

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trucks (E507, E508, E509, E510), limestone delivery system, and limestone pile maintenance (E802) shall be operated in accordance with good air pollution control practices to minimize emissions. (NSR 63M6R1, Condition 1.o)

Monitoring: No less than once each calendar year, PNM shall inspect the coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance. (NSR 63M6R1, Condition 3.h)

Recordkeeping: In accordance with Section B109, PNM shall record the results of the inspection for the coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance. (NSR 63M6R1, Condition 4.j) Records and/or logs of control practices to demonstrate compliance with the controls take in the permit application shall be maintained and summarized in the Semi-annual reports.

Reporting: No reporting required in accordance with Section B110.J of this permit.

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D. NSPS Subpart OOO (Units E803, E804, and E805 (limestone process equipment))

Requirement: Allowable emission limits

Monitoring: The units are subject to and shall comply with the requirements of 40 CFR 60, Subpart A and of 40 CFR 60, Subpart OOO, 60.675(c) for monitoring emissions.

Recordkeeping: In accordance with the applicable requirements of 40 CFR 60, Subpart OOO, 60.676(f). Records of any periodic opacity determinations will be maintained.

Reporting: In accordance with the applicable requirements of 40 CFR 60, Subpart OOO. Opacity test results will be submitted to the NMED.

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A407 Storage Silos (activated carbon, fly ash)

A. Activated Carbon Silo Baghouses (Units E901, E902, E903, and E904)

Requirement: Activated Carbon for Mercury emissions control

(1) Each of the activated carbon silos shall be equipped with a baghouse operated according to manufacturer's guidelines and specification. The baghouse shall have a design PM emission rate of 0.0092 grains/scf or less and a design baghouse exhaust flow of rate of 578 scfm or less. (NSR 63M6R1, Condition 1.v)

(2) The activated carbon shall be introduced into the exhaust stream prior to the baghouse used to control particulate matter from the respective boilers. (NSR 63M6R1, Condition 1.w)

(3) Each activated carbon baghouse shall be equipped and operated with a device to continuously monitor the pressure differential across the baghouse to insure continued compliance. (NSR 63M6R1, Condition 1.x)

Monitoring: PNM shall monitor the pressure drop across each activated carbon silo baghouse whenever the silos are loaded. The data capture rate shall be no less than once every six minutes. At a minimum the record shall include the silo designation, date, time, pressure differential, and in the event that the pressure differential is not continually monitored, the silo loading status (fan on or off). (NSR 63M6R1, Condition 3.f)

Recordkeeping: PNM shall follow the General Recordkeeping requirement in Section B109.

(1) PNM shall keep manufacturer's documentation onsite indicating that each activated carbon

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silo baghouse was designed to control PM emissions 0.0092 grains/scf or less, and design baghouse exhaust flow rate is 578 scfm or less. (NSR 63M6R1, Condition 4.h) .

(2) PNM shall keep records of the pressure drop across each activated carbon silo baghouse. (NSR 63M6R1, Condition 4.f)

(3) PNM shall keep the manufacturer’s documentation onsite that indicates the proper range that the pressure drop should be during normal operations of each activated carbon silo baghouse. (NSR 63M6R1, Condition 4.g)

Reporting: No reporting required in accordance with Section B110.J of this permit.

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B. Fly Ash/Limestone Silo Baghouses

Requirement: The fly ash silo loading (E505, E506, E518, and E519) and limestone silo loading (E803) shall be equipped and operated with baghouses. The baghouses shall be equipped and operated with devices to monitor the differential pressure drop across the baghouse. The control devices shall be operated and maintained in accordance with manufacturer’s specifications, including specifications for pressure drop, in order to achieve a minimum 99.5% control of TSP, PM₁₀, and PM emissions. Compliance with these requirements shall be determined using data generated and by Department inspections of the units. (NSR 63M6R1, Condition 1.j)

Monitoring: The permittee shall monitor emissions by measuring the pressure drop across each filter, daily. (NSR 63M6R1, Condition 4.d) PNM shall monitor and record the pressure drop across each fly ash silo baghouse (Units 505 and 506). (NSR 63M6R1, Condition 3.d) For baghouse associated with the Units E505, E506, E518, E519 and E803, PNM shall monitor the differential pressure drop across the baghouses, daily. (Units 505 and 506). (NSR 63M6R1, Conditions 3.n and 4.t)

Recordkeeping: In accordance with Section B109, PNM shall record the daily pressure drop measurements for each baghouse.

Reporting: No reporting required in accordance with Section B110.J of this permit.

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PART B GENERAL CONDITIONS**B100 Introduction**

- A. reserved

B101 Legal

- A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)
- (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act. (20.2.70.302.A.2.a NMAC)
 - (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (a) The department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
 - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.
 - (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)
 - (4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)

- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)
 - (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
 - (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
 - (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
 - (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
 - (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
 - (11) A responsible official (as defined in 20.2.70.7.AD NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
 - (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
 - (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)
- B. Permit Shield (20.2.70.302.J NMAC)
- (1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in [Table 103.A](#). The requirements in [Table 103.A](#) are applicable to this facility with specific requirements identified for individual emission units.

- (2) The Department has determined that the requirements in [Table 103.B](#) as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
- (3) This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under Section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.
- (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)

B102 Authority

- A. This permit is issued pursuant to the federal Clean Air Act ("federal Act"), the New Mexico Air Quality Control Act ("state Act") and regulations adopted pursuant to the state and federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.
- B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the federal Act. (20.2.70.302.A.5 NMAC)
- E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

- A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

B104 Appeal Procedures
(20.2.70.403.A NMAC)

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

Secretary, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Runnels Bldg. Rm N2153
P.O. Box 5469
Santa Fe, New Mexico 87502

B105 Submittal of Reports and Certifications

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to Stacktest.AQB@state.nm.us.
- B. Excess Emission Reports shall be submitted electronically to eereports.aqb@state.nm.us. (20.2.7.110 NMAC)
- C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
1301 Siler Road, Building B
Santa Fe, NM 87507-3113

- D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section
US EPA Region-6, 6EN-AA
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3). (20.2.70.302.A.1 and A.4 NMAC)

B107 Startup, Shutdown, and Maintenance Operations

- A. The permittee shall operate in accordance with the procedures set forth in the plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan), except for operations or equipment subject to condition B106 above. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements

(20.2.70. 302.A and C NMAC)

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current

version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.
- (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
 - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
 - (3) A minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.
- E. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition B108.
- F. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the full normal load as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% load cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report that is required to be furnished to the Department.
- G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- H. Monitoring shall become effective 120 days after the date of permit issuance if the monitoring is new or in addition to monitoring imposed by an existing applicable requirement. Any pre-existing monitoring requirements incorporated in this permit shall continue to be in force from the date of permit issuance.

B109 General Recordkeeping Requirements

(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective

during the term of this permit. The minimum information to be included in these records is (20.2.70.302.D.1 NMAC):

- (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
 - (2) date(s) and time(s) of sampling or measurements;
 - (3) date(s) analyses were performed;
 - (4) the qualified entity that performed the analyses;
 - (5) analytical or test methods used;
 - (6) results of analyses or tests; and
 - (7) operating conditions existing at the time of sampling or measurement.
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)
- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
- (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
 - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, and a description of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source.

B110 General Reporting Requirements

(20.2.70.302.E NMAC)

- A. Reports of all required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be contained in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. Reported numerical values shall not be truncated or rounded, and shall be recorded and reported to the number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- F. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.
- G. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.
- H. The permittee shall submit an emissions inventory for this facility annually. The emissions inventory shall be submitted by the later of April 1 or within 90 days after the Department makes such request. (20.2.73 NMAC and 20.2.70.302.A.1 NMAC)
- I. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
 - (2) The permittee and department shall attach each such notice to their copy of the relevant permit.
- J. Non-NSPS or non-MACT monitoring and recordkeeping requirements shall be maintained on-site and summarized in the semi-annual reports, unless alternative

reporting requirements are specified in the equipment specific requirements section of this permit.

B111 General Testing Requirements

A. EPA Reference Method Tests

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of 40 CFR 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by 40 CFR 60, Appendix A:
 - (a) Methods 1 through 4 for stack gas flowrate
 - (b) Method 5 for TSP
 - (c) Method 6C and 19 for SO₂
 - (d) Method 7E for NO_x (test results shall be expressed as nitrogen dioxide (NO₂) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO₂ is equivalent to 1.194 x 10⁻⁷ lb/SCF)
 - (e) Method 9 for opacity
 - (f) Method 10 for CO
 - (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
 - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
 - (i) Method 29 for Metals
 - (j) Method 201 for filterable PM₁₀
 - (k) Method 202 for condensable PM
 - (l) Method 320 for organic Hazardous Air Pollutants (HAPs)
 - (m) Method 25A for VOC reduction efficiency
- (2) Alternative test method(s) may be used if the Department approves the change.

B. Portable Analyzer Requirements

- (1) The permittee shall follow the *SOP for Use of Portable Analyzers in Performance Tests* posted to NMED's Air Quality web site under Compliance and Enforcement/Testing.
- (2) A portable analyzer that is used for periodic emissions tests must meet the requirements of ASTM D 6522 – 00. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be used until it is replaced.

- (3) The portable emissions analyzer shall be setup and operated in accordance with the manufacturer's instructions, with the requirements of ASTM D-6522-00, or with the criterion of an analyzer previously approved by the Department.
- (4) During emissions tests, pollutant, O₂ concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

C. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days prior to the test date and allow a representative of the Department to be present at the test.
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's *Universal Test Notification, Protocol and Report Form and Instructions*. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment. Sample ports of a size compatible with the test methods shall be located on the stack with the provisions of EPA Method 1 of 40 CFR 60, Appendix A. The stack shall be of sufficient height and diameter so that a representative test of the emissions can be performed in accordance with EPA Method 1.
- (5) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed.

B112 Compliance

- A. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three days unless the Department allows additional time. Required records may include records required by permit and other information

necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)

- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at email:reportsgroup.aqb@state.nm.us. For additional reporting guidance see http://www.nmenv.state.nm.us/aqb/enforce_compliance/TitleVReporting.htm. (20.2.70.302.E.3 NMAC)
- E. For sources that have submitted air dispersion modeling that demonstrates compliance with federal ambient air quality standards, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with federal ambient air quality standards specified at 40 CFR 50 NAAQS.
- F. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):
 - (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;
 - (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;
 - (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
 - (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.

B113 Permit Reopening and Revocation

(20.2.70.405.A.1 NMAC)

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A.3 or A.4 occurs.
- (1) Additional requirements under the federal Act become applicable to this source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
 - (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
 - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
 - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

B114 Emergencies

(20.2.70.304 NMAC)

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.
- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;

- (2) This facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B115 Stratospheric Ozone

(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices. (subsection 82.156)
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (subsection 82.158)
 - (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (subsection 82.161)

B116 Acid Rain Sources

(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.
- B. Where an applicable requirement of the federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that

such increases do not require a permit modification under any other applicable requirement.

- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the federal Act.
- G. The acid rain permit is an enclosure of this operating permit.

B117 Risk Management Plan

(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

PART C MISCELLANEOUS

C100 Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
 - (1) Excess Emission Form (for reporting deviations and emergencies)
 - (2) Compliance Certification Report Form
 - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions
 - (4) SOP for Use of Portable Analyzers in Performance Tests

C101 Definitions

- A. **“Daylight”** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for

one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).

- B. **“Exempt Sources”** and **“Exempt Activities”** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.
- C. **“Fugitive emission”** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- D. **“Insignificant Activities”** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate.
- E. **“Natural Gas”** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)
- F. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- G. **“National Ambient air Quality Standards”** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.
- H. **“NO₂”** or **“Nitrogen dioxide”** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **“nitrogen dioxide,”** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO_x or NO_x. (20.2.2 NMAC)
- I. **“NO_x”** see NO₂
- J. **“Potential Emission Rate”** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.

- K. **"Shutdown"** means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- L. **"Startup"** means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn
acfm.....	actual cubic feet per minute
AFR.....	air fuel ratio
AP-42.....	EPA Air Pollutant Emission Factors
AQB.....	Air Quality Bureau
BTU.....	British thermal unit
CAA.....	Clean Air Act of 1970 and 1990 Amendments
CEM.....	Continuous Emissions Monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR.....	Code of Federal Regulation
CO.....	carbon monoxides
EIB.....	Environmental Improvement Board
EPA.....	United States Environmental Protection Agency
gr./100 cf.....	grains per one hundred cubic feet
gr./dscf	grains per dry standard cubic foot
HAP	hazardous air pollutant
hp	horsepower
IC	Internal Combustion
KW/hr	kilowatts per hour
lb/hr.....	pounds per hour
lb/MMBtu	pounds per million British thermal unit
MACT	Maximum Achievable Control Technology
MMcf/hr.....	million cubic feet per hour
MMscf.....	million standard cubic feet
N/A.....	Not Applicable
NAAQS.....	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NG	Natural Gas
NMAAQS	New Mexico Ambient Air Quality Standards
NMAC	New Mexico Administrative Code
NMED.....	New Mexico Environment Department
NMSA.....	New Mexico Statues Annotated
NOx.....	nitrogen oxides
NSCR.....	Non-selective Catalytic Reduction

NSPS	.....	New Source Performance Standard
NSR	.....	New Source Review
PEM	.....	Parametric Emissions Monitoring
PM	.....	particulate matter (equivalent to TSP, total suspended particulate)
PM ₁₀	.....	particulate matter 10 microns and less in diameter
PM _{2.5}	.....	particulate matter 2.5 microns and less in diameter
pph	.....	pounds per hour
ppmv	.....	parts per million by volume
RICE	.....	reciprocating internal combustion engine
rpm	.....	revolutions per minute
scfm	.....	standard cubic feet per minute
SO ₂	.....	sulfur dioxide
TAP	.....	Toxic Air Pollutant
TBD	.....	to be determined
THC	.....	Total Hydrocarbons
TSP	.....	Total Suspended Particulates
tpy	.....	tons per year
USEPA	.....	United States Environmental Protection Agency
UTM	.....	Universal Transverse Mercator Coordinate system
UTMH	.....	Universal Transverse Mercator Horizontal
UTMV	.....	Universal Transverse Mercator Vertical
VOC	.....	volatile organic compounds

C103 Acid Rain Permit, P062AR2 Appendix A

C104 CAM Plan Appendix B

Compliance Assurance Monitoring Plan

prepared in support of the

**San Juan
Generating
Station**

P062R2

**OPERATING PERMIT
RENEWAL APPLICATION**

Submitted by

**Public Service
Company of
New Mexico**

July 2010

Compliance Assurance Monitoring Plan

prepared in support of the

**San Juan
Generating
Station
P062R2**

**OPERATING PERMIT
RENEWAL APPLICATION**

100 Introduction

SJGS operates under Title V Operating Permit P-062R1. Operating Permit P062R1 was issued on February 4, 2005. A Title V renewal application was submitted to the New Mexico Environment Department in February 2009. The renewal application included several modifications that either had been made or were in progress to implement the provisions of a Consent Decree filed in the United States District Court, District of New Mexico. The court entered this consent decree on May 10, 2005. The consent decree contains emission limit requirements for nitrogen oxides (NO_x), sulfur dioxide (SO₂) and particulate matter (PM) that are in addition to previously existing permit limits. The consent decree also places a limit of 20 percent opacity on E302 (Unit 2). As a pre-NSPS unit, Unit 2 had not previously been subject to the NSPS based opacity limits.

The Title V permit renewal application submitted in February 2009 did not, for several reasons, include specific updates to SJGS CAM Plan. These reasons include: work was still in progress on some of the units, and insufficient operational experience had been obtained on the other units to establish appropriate CAM parameters. This revised CAM plan is being submitted to update the SJGS CAM Plan to reflect the facility modifications that were addressed in the Title V renewal application.

The consent decree based environmental upgrades include changes in operations and emission limits for SO₂, NO_x, opacity (for Unit 2) and PM. However, SJGS uses CEMS to determine compliance with SO₂ and NO_x emission limits and COMS to determine compliance with opacity emission limits. The CEMS for SO₂ and NO_x are required under acid rain regulations and, therefore, exempt SO₂ and NO_x from CAM requirements. Even if CAM was applicable to SO₂ and NO_x, CEMS are considered presumptively acceptable to fulfill all requirements of the 40 CFR 64 CAM rule. COMS are required on all SJGS units per the requirements of SJGS NSR permit 0063-M6R1. Therefore, this CAM plan revision addresses PM only.

A. Control Equipment

A.1 Filterable Particulate Matter , Boiler Units 1, 2, 3 and 4 (permit units E301, E302, E303 and E304) – Babcock and Wilcox Fabric Filter (1 fabric filter system per unit).

B. Applicable Regulations, Emission Limits, Monitoring Requirements

B.1 Filterable Particulate Matter

Applicable Regulations

20.2.14 NMAC

20.2.70 NMAC (Operating Permit No. P062R1)

20.2.72 NMAC (NSR Permit No. 0063-M6R1)

40CFR60 Subpart D (Units E301, E303, E304)

Consent Decree (applicable consent decree limits are being incorporated into this Operating Permit renewal)

Emission Limits

<i>Basis for Limit</i>	<i>Unit 1 (E301)</i>	<i>Unit 2 (E302)</i>	<i>Unit 3 (E303)</i>	<i>Unit 4 (E304)</i>
NSR/Operating Permit/20.2.14 NMAC	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg	0.05 lbs/mmBtu, 3 hr avg
NSR/Operating Permit/40CFR60 Subpart D NSPS	0.1 lbs/mmBtu, 3- hr avg	NA	0.1 lbs/mmBtu, 3- hr avg	0.1 lbs/mmBtu, 3- hr avg
20.2.14NMAC (PM2 limit as an alternate to the 0.05 PM limit)	0.02 lbs/mmBtu, 30- day average	0.02 lbs/mmBtu, 30- day average	0.02 lbs/mmBtu, 30- day average	0.02 lbs/mmBtu, 30- day average
Operating Permit (TPS and PM10 limits)	174.8 lbs/hr	173.9 lbs/hr	271.6 lbs/hr	266.5 lbs/hr
Consent Decree Limits	0.015 lbs/mmbtu, 3- hr avg.	0.015 lbs/mmbtu, 3- hr avg.	0.015 lbs/mmbtu, 3- hr avg.	0.015 lbs/mmbtur, 3- hr avg.

Monitoring Requirements

SJGS must perform quarterly compliance tests for PM10 and PM2.5 using EPA Method 5 per conditions 6. b and c of NSR Permit No. 0063-M6R1.

C. Monitoring Approach

C.1 Filterable Particulate Matter

Indicators

1. Visible emissions (opacity) as measured by COMS systems meeting the 40 CFR60 Performance Specification One and located in the fabric filter outlet duct from each unit (per an Alternative Monitoring Plan submitted to EPA).
2. Differential pressure drop across the fabric filter on each unit.
3. By-pass damper position (open/closed) indicator.

Measurement Approach

1. The COMS system is operated per the procedures specified in 40 CFR 60 Subpart D.
2. Differential pressure (in inches of water) is measured across each fabric filter system with a continuous monitoring system averaged over 1-minute periods.
3. Limit switches on the by-pass damper indicate the open/closed status to the plant DCS (Distributed Control System) system.

Indicator Ranges

Indicator 1 – An excursion is defined as a condition when the average opacity exceeds six (6) percent for any consecutive 3-hr period.

Indicator 2 – An excursion is defined as a condition when the fabric filter average differential pressure exceeds 10 inches water column (w.c) for any consecutive 3-hr period.

Indicator 3 – An excursion is defined as a condition when the by-pass damper is in the open position any time when the boiler is in operation.

Corrective Action Thresholds

If any indicator range is exceeded, SJGS personnel and/or their consultants or sub-contractors will initiate an evaluation of the fabric filter and associated instrumentation no later than the end of the next regular business day after the time of discovery of the excursion period. This evaluation will include one or more of the following as needed to determine the cause of the excursion:

- Evaluation of opacity monitor or monitors indicating high values.
- Evaluation of the differential pressure drop measurement instruments indicating high values.
- Evaluation of operating data relevant to fabric filter system air pulse cleaning system for the affected fabric filter.
- Evaluation of access hatches and physical integrity of ducts and fabric filter equipment for the affected fabric filter system.
- Evaluation of fabric filter solids handling equipment for the affected system.
- Internal inspections of the affected fabric filter system/compartments including bag integrity, potential leaks as necessary.

If the evaluations initiated by an excursion of any indicator range indicate that corrective action is necessary, SJGS will implement corrective action as soon as practicable to minimize possible deviations from filterable particulate matter emission limits.

D. Monitoring Data Performance Criteria

PM Indicator 1 – The opacity monitors installed in the duct between the fabric filters and the SO₂ absorbers on each unit are at locations that provide representative measurements of the opacity in the duct. The locations have been approved in an Alternative Monitoring Plan submitted by SJGS to the EPA. The opacity monitor locations provide measurement at a location free of condensed water droplets that could interfere with accurate opacity determination. The opacity monitors are sited at locations where the beam passes through the centroid area of the ducts and meets siting criteria regarding distances from flow disturbances.

PM Indicator 2 – The differential pressure drop transmitters are located at appropriate locations as determined by the fabric filter manufacturer to provide accurate pressure drop measurement data across the fabric filter system.

PM Indicator 3 – There are only two possible conditions of the by-pass damper – open or closed. In the open or closed position, the damper actuates contact switches that

indicate the position.

The performance of the monitoring instruments providing indicator data are verified in accordance with the requirements of 40 CFR63(b)(2).

PM Indicator 1- The installed COMS meet the design specifications of 40 CFR 60 Performance Specification One. The installed COMS meet the following field audit performance specifications.

- o The calibration error ≤ 2 percent opacity for each of the calibration attenuators.
- o The COMS upscale and downscale response times are <10 seconds as measured in the COMS data recorder.
- o The COMS data recorder averages and records each calibration attenuator value within $\pm 2\%$ opacity of the certified value of the attenuator.
- o The COMS are capable of measuring and recording opacity and perform daily calibration drift assessments for 176 hours without unscheduled maintenance, repair or adjustment.

PM Indicator 2 – The fabric filter differential pressure transmitters will be calibrated by plant personnel every two years using an electronic calibrator.

PM Indicator 3 – The damper contact switches will be checked by plant personnel once per year by visually examining the physical damper position (open and closed) and comparing the result to the position indicated by the plant DSC system.

The monitoring instruments used to provide CAM data are subject to routine quality assurance and quality control procedures to insure they provide valid data as required by 40 CFR 64.3(b)(3).

PM Indicator 1 – Zero level and span level automatic daily calibration drifts will be performed. The zero-level calibration standard will be between 0 and 6.0 percent of the span value and the span-level calibration will be between 30 and 50 percent of the span value. The COMS zero and upscale calibration drift error will be limited to not greater than 2 percent opacity over a 24-hour period. The zero and span will be adjusted if the daily zero or span drift exceeds two times the specified limit. The optical surfaces will be cleaned if the cumulative automatic zero compensation exceeds 4 percent opacity.

PM Indicator 2 – The pressure taps are cleaned monthly. The differential pressure

transducer is inspected, adjusted and calibrated once per year.

PM Indicator 3 - The bypass limited switches are inspected once per year.

The systems used to measure and monitor all three PM Indicator ranges are in operation at all times (except during periods of instrument calibration and maintenance) the boilers are in operation at each boiler unit.

The opacity monitoring systems on each unit perform one sampling and analyzing cycle at least every successive 10-second period and perform a data recording cycle for each successive 6-minute period. The opacity monitoring systems allow the amount of the zero and span drift to be recorded and quantified.

The differential pressure drop data on each unit are logged at a frequency of at least four times per hour and are integrated to yield one-hour averages as required by 40 CFR 64.3(b)(4).

The status of the bypass limit switches on each unit is recorded at least once per hour by the plant DSC system.

The opacity and differential pressure drop data are evaluated on a 3-hour block average and compared with the indicator ranges.

E. Rationale for Selection of Performance Indicators

E1. Justification of Filterable Particulate Matter Indicators and Indicator Ranges

PM Indicator 1 – Fabric filter operating problems identified by Indicator 1 include, but are not limited to the following:

- Leaks of unfiltered boiler exhaust gas through worn seals or improperly seated bypass duct dampers
- Failure of one or more filter bags in the fabric filter
- Excessive seepage of fine particulate matter through filter bags due to cleaning related problems.

There is no precise relationship between opacity and filterable particulate matter concentration in the boiler exhaust gases. However, opacity is recognized as a primary indicator of proper fabric filter operation. SJGS has confirmed, through quarterly compliance tests that, during normal fabric filter operations, SJGS is in compliance with all PM emission limits. General information available for fabric filters on coal-fired power plants (such as review of CAM plans for other baghouses on other coal fired units) indicates that 6.0 percent opacity is a typical value that, if exceeded, indicates potential fabric filter problems.

PM Indicator 2 – Fabric filter operating problems identified by Indicator 2 include, but are not limited to the following:

- Inadequate reverse gas flow due to problems with the bag cleaning system, failure of one or more internal compartment dampers, accumulation of deposits on the bags interior surfaces.
- Localized high air-to-cloth ratio conditions caused by excessive differences in gas flow rates through different compartments or an excessive number of compartments out of service.

This indicator range is based on fabric filter manufacturer specifications and site operational experience. The fabric filter is alarmed to indicate excessive differential pressure if the pressure differential exceeds 10 inches of water. The indicator range pressure is below the pressure that would cause damage to the filter bags or fabric filter system.

PM Indicator 3 – The bypass dampers should be closed during all routine operation. An open bypass damper during anytime the boilers are in operation on that unit indicates a malfunction condition.

F. Reporting and Recordkeeping

SJGS will submit monitoring reports to the NMED in accordance with the requirements of 20.2.70 NMAC and 40 CFR 64.7(a) as required in the SJGS Title V Operating Permit.

Statement of Basis - Narrative
TV and Acid Rain Permits

Company: Public Service Company of New Mexico (PNM) - (Air Quality)

Facility: Public Service Co of New Mexico - San Juan Generating Station

Permit No(s): 0063M6R1 and P062R2 and P062AR2

Tempo/IDEA ID No.: 1421 - PRT20090001, and PRT20090002

Permit Writer: Joseph Kimbrell

P e r m i t R e v i e w	Date to Enforcement: 5/6/10	Inspector Reviewing: Scott Vail, Tom F.
	Date Enf. Review Completed: 5/11/10	Date of Reply: (if necessary) Several
	Date to Applicant: 5/6/10; 8/4/10	Date of Reply: 5/25/10
	Date of Comments from EPA: 7/15/10-8/30/10; 8/4/10 - 9/20/10	Date to EPA: June 23, 2010 7/15/10-8/30/10; revised 8/4/10
	Date to Supervisor: SOB/Draft 3/9/09, Proposed 7/26/10	
	May 7, 2010 comments on draft permit received from WildEarth Guardians and San Juan Citizen Alliance. Reply to comments sent on August 4, 2010. See Attached.	
	EPA ROC dated 9/20/10, NMED response dated 10/29/10. See attached	
	Based on comments in EPA ROC, sent email on CO PSD concern to PNM, 10/4/10. Received PNM response dated 10/25/10. See attached.	

1.0 Plant Process Description:

PNM SJGS is a coal-fired electric generating station located approximately 3 miles north-northeast of Waterflow, New Mexico. The facility consists of four coal-fired boilers (Units 1-4) which burn coal received by conveyors from the adjacent San Juan Mine to generate high-pressure steam that powers a steam turbine coupled with an electric generator. Electric power thus produced by the units is supplied to the electric power grid for sale. This is a pulverized coal fired power plant with 4 boilers. The boilers began operations in 1976, 1973, 1979, and 1982.

2.0 Description of this Modification: Renewal of Operating and Acid Rain Permits and includes modification authorized by NSR 0063M4 thru 63M6R1. No changes are being made to equipment or operating procedures as a result of the Operating or Acid Rain applications.

There have been modifications at the SJGS since the P062R1 operating permit was issued. These modifications are related to the provisions of a Consent Decree filed in the United States District Court, District of New Mexico. The court entered this consent decree on May 10, 2005. The consent decree contains emission limit requirements for nitrogen oxides (NO_x), sulfur dioxide (SO₂) and particulate matter (PM) that are in addition to previously existing permit limits. The consent decree also places a limit of 20 percent opacity on E302 (Unit 2). As a pre-NSPS unit,

Unit 2 had not previously been subject to the NSPS based opacity limits. The consent decree also included a requirement that SJGS install and operate a mercury control system. Condition 81 of the consent decree requires that all applicable requirements of the consent decree be incorporated into the SJGS Operating Permit upon that renewal.

Completed consent decree requirements:

Unit 4: Limits on NO_x, SO₂ and filterable PM emission rates achieved through installation of new a new fabric filter for PM control, and low-NO_x/OFA for NO_x control and increased wet scrubbing for SO₂. Installed activated carbon injection equipment. This was achieved by 10/31/07.

Unit 3: Limits on NO_x, SO₂ and filterable PM emission rates achieved through installation of new a new fabric filter for PM control, and low-NO_x/OFA for NO_x control and increased wet scrubbing for SO₂. Installed activated carbon injection equipment. This was achieved by 04/30/08.

Unit 1: Limits on NO_x, SO₂ and filterable PM emission rates achieved through installation of new a new fabric filter for PM control, and low-NO_x/OFA for NO_x control and increased wet scrubbing for SO₂. This was achieved by 10/31/08.

Consent Decree requirements in progress with expected completion before renewal permit is issued:

Unit 2: Limits on NO_x, SO₂ and filterable PM emission rates achieved through installation of new a new fabric filter for PM control, and low-NO_x/OFA for NO_x control and increased wet scrubbing for SO₂. This work is on schedule for completion by 3/31/09.

Consent Decree requirements that may not be complete before the renewal permit is issued:

SJGS must evaluate the NO_x emission rate that can be achieved by the low NO_x burners/OFA systems based on the first 12 months of operation at each unit. Based on this evaluation, the 30-day average NO_x emission limit may be lowered from the initial 0.3 lbs/MMBtu if the unit is capable (with a 10 percent margin) of meeting a lower limit. However, the 12-month evaluation period does not begin until a NO_x monitoring protocol is agreed upon with the NMED and the consent decree plaintiffs. Once a report, based on the 12-month evaluation period for each unit, is submitted to the NMED and Plaintiffs it is subject to an approval process as outlined in Section IX of the consent decree. Therefore, final approval may extend some time period beyond completion of the 12-month report. The completion date for some of the consent decree requirements is after the submittal date for this operating permit renewal application.

The consent decree does not specify specific mercury removal requirements, but instead requires that operating parameters be identified to achieve mercury reduction. These parameters are to be based on experience with operating mercury controls on Units 3 and 4. Per Condition 9d(ii) of the consent decree, a report of these operations is due within 90 days after the 1 ½ years after startup of the first mercury control unit (i.e. by 7/31/09). After the report is submitted to the NMED and Plaintiffs it is subject to an approval

*0063M6R1 access/1/2009. Therefore final approval NSR is not proposed and period beyond the completion of the 7/31/09 report. Consent decree condition 20 (b)(1) and (11) states that mercury reduction operation requirements for Units 3 and 4 should commence no later than 6/30/09 and for Units 1 and 2 no later than 1/30/10. However, permit condition 9(d)(i) ERS identified mercury operation parameters may not have been approved by the 6/30/09 date for Units 3 and 4.

This operating permit renewal application includes all of the modifications, as required by the consent decree, that have been completed to date and it also includes the modifications in progress on Unit 2, as these are expected to be completed before a renewal permit is issued in response to this renewal application.

Revised NOx emission limits, based on the 12-month testing period described above, have not been explicitly included in this renewal application. PNM proposes working with the NMED during the operating permit renewal process to incorporate, to the extent possible, permit terms that would allow revision, if necessary, of the 30-day NOx limit without the need to re-open the operating permit. For mercury control, the operating procedures needed to maximize mercury removal per the consent decree requirements are not yet available to explicitly incorporate in this permit renewal application. Additional information may be available prior to a final action on this application and PNM proposes working with the NMED during the operating permit renewal process to incorporate, to the extent possible, permit terms that would allow incorporation of mercury operational requirements without the need to re-open the operating permit.

3.0 PSD Applicability:

Title V action does not determine PSD applicability; see the History Table for a summary of previous PSD applicability determinations.

- A. This facility is an existing PSD Major Source. SJGS is a major source under both 20.2.70 NMAC (Title V) and under 20.2.74NMAC (PSD). SJGS has a Title V Operating Permit, but does not have a 20.2.74 NMAC (PSD) permit as the facility was constructed prior to applicability of 20.2.74NMAC and has not undergone a major modification as of the date of the last NSR permitting action, see history table.

4.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that are have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
P062R2 & P062AR2	This action	Renewal	Renewal of Operating and Acid Rain Permits and includes modification authorized by NSR 0063M4 thru 63M6R1. Removal of emergency generator from permit condition since there meet the definition of emergency generators and insignificant activities.

0063M4R1	9/14/2008 20, 2005	RecheReg . Significant Revision	<p>SJGS modification consists of fabricating Units 8518 and 8519 (60 hours) to meet the existing Boiler Unit 42 to reflect the (consolidation) of the existing boiler units. The initial testing procedures provided by the Units 1-ESRs and will be with specific conditions. The estimated CO PSD applicability of this facility is 1997 NSR Major 0063M2 was for the replacement of the Limestone scrubber. The project emissions for this modification are significant. CO testing had to be required (project and significant) CO limits had to be required for this modification (the NSR 0063M2 PSD applicability of this facility is 1997 NSR Major 0063M2).</p>
*0063-M6	4/22/2008	Significant Revision	<p>PM modification consists of the EPA Method 5 test for the boiler. The limestone conditions that have nothing to do with particulate emitted into the air from the activities associated with delivery and injection of activated carbon into the combustion exhaust of each boiler. The activated carbon is used to control mercury emissions. There will be four silos (one for each boiler) constructed. Each silo will have a baghouse. The emissions established in 0063M4 are sufficient enough to include any extra emissions originating from the carbon injection. The particulate emissions limit from the boiler stack will remain unchanged. Emissions are generated from the delivery of the activated carbon, loading activated carbon, operations of the silo, cleaning of the baghouse, and those emissions that were not captured by the boiler's baghouse. The operations of the silo require a constant stream of air to flow through the activated carbon to keep it fluid.</p>
0063M5R1	12/5/2007	Admin Rev	<p>This revision consists of adding an emergency Cummins Diesel generator model DSHAF located at the SJGS data center as an exempt piece of equipment.</p>
*P062R1M1	6/11/2007	Significant Revision	<p>Incorporate NSR Permit 0063M3 conditions into body of TV. This changed the Carbon Monoxide (CO) emission rates for Units 1-4. The permit template language was updated. This was discussed with Cathy Penland of EPA Region 6 on 2/12/07. At final review stage, Richard Goodyear directed the reference to the Compliance Schedule from NSR 0063M4 in Condition 7.4 be removed since the schedule was not as a results of this facility being out of compliance IAW our State Regulations.</p>
0063M5	Withdrawn 10/20/06	R e g . Significant Revision	<p>Temporary pumps in the river.</p>
0063M4	Sept 18, 2006	R e g . Significant Revision	<p>This modification consists of adding fabric filters to each boiler, replacing the existing boiler burners with low-NOx burners, and increasing the control efficiency of the wet limestone scrubber. NSR 0063M4 includes all requirements of the March 10, 2005 Consent Decree.</p>

0063M3	Jan 22, 1997, 2005	R e g . Significant Revision	New Modified Consent Decree. This modification allowed for construction of limestone forced oxidation scrubbers to replace older Wetman-Lord FGD system scrubbers for SO ₂ emissions. This NSR permit also brought the four generating units (1, 2, 3, 4) at the facility under a single NSR permit (they had previously been permitted separately). This permit 0063M2 was for the replacement of the Limestone scrubber control system for SO ₂ . Since the facility was so old, CO testing had never been required and the permitted CO limits had been based on calculation. As part of the Permit 63M2 PNM was required to perform CO EPA Method Test for the first time. The limestone scrubbers have nothing to do with CO emissions. So the CO method test was used to verify existing CO emissions due to NO modification to the facility. The Permit 0063M3 increased the permitted emissions from ~2,000 to ~39,000 as a result of the CO Method test.
	Mar 10, 2005 (s i g n e d 3/9/05)	Date lodged in Court	The Department and PNM consent to entry of Consent Decree without further trial or appeal. Refer to complete Consent Decree for complete history of events.
P062R1	Feb. 4, 2005	Renewal	Incorporated NSR Permit 0063M2 and 0063M2R1. This permit for first time required CO compliance Testing. Units E301, E302, E303, and E304 (boilers) are subject to periodic compliance testing for PM, TSP, PM-10, PM-2, CO, and VOC using stack tests and Unit E803 is subject to periodic compliance testing for PM using stack tests. The tests for PM, TSP, PM-10, and PM-2 on Units E301, E302, E303, and E304 (boilers) shall be performed within 6 months of issuance of this permit and annually thereafter. The tests for CO and VOC on Units E301, E302, E303, and E304 (boilers) shall be performed within 6 months of issuance of this permit and quarterly thereafter. The tests on Unit E803 shall be performed at the discretion of the Department.
			CO test results from May 2005 test showed permit limits exceedance and application for NSR Application developed for NSR 63M3. Next quarterly test in July 2005 showed CO levels needed to be adjusted for summer high temperatures, resulting in the permit limits established in NSR 63M3.
	May 26, 2004	Order entered	Found 42,008 opacity limit violations would be addressed in the remedy phase.
	May 16, 2002	Citizen Suit	Grand Canyon Trust and Sierra Club filed citizen suit against PNM alleging violations of CAA, violating the 20 % opacity emission limits for Units 1-4, and units 3 and 4 did not have a PSD permit. In the CD PNM was awarded summary judgment on the PSD issue "WHEREAS, on August 20, 2003, the Court granted PNM's motion for summary judgment on Plaintiffs' PSD claim
0063M2R1	Sept 17, 1999	Technical Revision	This revision allowed the use of a previously idle cooling tower at the facility (Emission Unit E411 in Title V Permit No. P062R1).
P062	June 28, 1998	New Title V	First Operating Permit

0063M2	Jan. 22, 1997	R e g . Significant Revision	New FGD reduced SO ₂ emissions. This modification allowed for construction of limestone forced oxidation scrubbers to replace older Wellman-Lord FGD system scrubbers for SO ₂ control. This NSR permit also brought the four generating units (1, 2, 3, 4) at the facility under a single NSR permit (they had previously been permitted separately). This permit supercedes all previous permits.
0063M1	Jan. 5, 1987	Modified and reissued	This permit is in response to Company Ltr dated 11/13/1986 requesting that the air quality permit for Unit 4 at the San Juan generating Station be modified and reissued to conform to the 1980 amendments to the Air Quality Control Regulation 602 regarding sulfur dioxide emission rates.
0062M1	Jan. 5, 1987	Modified and reissued	This permit is in response to Company Ltr dated 11/13/1986 requesting that the air quality permit for Unit 3 at the San Juan generating Station be modified and reissued to conform to the 1980 amendments to the Air Quality Control Regulation 602 regarding sulfur dioxide emission rates.
0013M1	Jan. 5, 1987	Modified and reissued	This permit is in response to Company Ltr dated 11/13/1986 requesting that the air quality permit for Unit 1 at the San Juan generating Station be modified and reissued to conform to the 1980 amendments to the Air Quality Control Regulation 602 regarding sulfur dioxide emission rates.
0063	Sept 15, 1975	Cert. Of Registrn.	To install Unit # 4
0062	1982	Cert. Of Registrn.	To install Unit # 3. These documents could not be located at this time, 2/1/2007.
0013	1975	Cert. Of Registrn.	To install Unit # 1. These documents could not be located at this time, 2/1/2007.
Cert. Of Registrn.	Oct. 5, 1973	Cert. Of Registrn.	To install Unit #2. These documents could not be located at this time, 2/1/2007.

5.0 Public Response/Concerns: As of 5/6/10 there have been many comments from the public on the draft permit and they will be summarized and addressed in next update. Public comment period ran from 4/2/10 through 5/2/10, with last comments received on May 7, 2010.

Approximately 300 emails concerning Green House Gas (GHG) emissions were received. Two letters were received by email: one signed by Jeremy Nichols, WildEarth Guardians dated May 7, 2010 with co-signatures of four other environmental groups; and one signed by Mike Eisenfeld, San Juan Citizens Alliance dated May 7, 2010 also with co-signatures of four other environmental groups.

Reply to the ~300 email sent by Ned Jerabek via email on July XX, 2010. Reply to the two letters were emailed by Joseph Kimbrell on August 04, 2010.

No significant changes to the draft permit were made as a result of comments. However, there is a high probability that this permitting action will go to Public Hearing only because of the number of emails and co-signatures on the letters.

6.0 Compliance Testing:

Unit No.	Test Description	Test Date
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1,2,3,4	EPA Method 5 for Particulate Matter	12/15 – 12/17/2008
1,2,3,4	EPA Method 10 for CO	12/15 – 12/17/2008

The boilers have CEMS for NOX and SO₂. The boilers have continuous opacity monitors (COMS) for particulate. Quarterly testing is required for TSP, PM₁₀, and CO.

7.0 Startup and Shutdown:

A. Was a Startup, Shutdown, and Malfunction Plan (SSM) submitted: Yes.

B. Were emissions from startup, shutdown, and scheduled maintenance operations calculated and included in the emission limits? Yes.

C. Based on past operational experience, SJGS has experienced periods of excess emissions during startup and shutdown. The environmental improvement programs being made as part of the consent decree are expected to substantially reduce, but not totally eliminate the possibility of emissions in excess of normal permit limits during startup and shutdown. PNM has conducted a review of available experience during operation with the new environmental systems. Based on this review, PNM anticipates that SJGS will have ~~to~~ potential to exceed normal operation permit limits during SSM for NOx only. On this basis PNM has included specific SSM limits for NOx in Table 2-F of the permit application for P062R2.

8.0 Compliance and Enforcement Status [Title V only]: The PNM San Juan Generating Station is currently involved in an active Consent Decree for violating the emission limits for NOx, SO₂, particulate matter, and opacity. At this time they appear to be in compliance with the conditions of the Consent Decree. Renae Held, March 2, 2009

9.0 Modeling: No modeling is or was needed for this action.

10.0 State Regulatory Analysis(NMAC/AOCR):

<u>STATE REGULATIONS CITATION</u>	<u>Title</u>	<u>Applies to Entire Facility</u>	<u>Applies to Unit No(s).</u>	<u>Federally Enforce-able</u>	<u>JUSTIFICATION FOR USE:</u>
20.2.3 NMAC	Ambient Air Quality Standards NMAAQs	X		X	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. For NSR permit this applies, For Title V permit this does not apply.
20.2.5 NMAC	Source Surveillance	X			Excess Emissions During Malfunction, Startup, Shutdown, or Scheduled Maintenance
20.2.7 NMAC	Excess Emissions	X		X	All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation. Also listed as applicable in NSR Permit NM063M6R1.

Air Quality 20.2.14 NMAC	Particulate Emissions from Coal Burning Equipment		E301, E302, E303, E304	X	Limits PM emissions from main boiler stacks. 0.05 lb TSP/mmBtu (3-hr avg) OR 0.02 lb PM2/mmBtu(E301,E303,E304), 0.04 lb PM2/mmBtu (E302).
20.2.31 NMAC	Coal Burning Equipment - Sulfur Dioxide		E301, E302, E303, E304	X	Limits SO2 emissions from main boiler stacks. 13,000 lbs/hr (combined, 3-hr avg); 0.55 lb mmBtu (30-day avg); 1.2 lbs/mmBtu (3-hr avg. E301, E303, E304); 28% (30-day avg, E302).
20.2.32 NMAC	Coal Burning Equipment: NO ₂		E301, E302, E303, E304	X	Limits Nox emissions from main boiler stacks. 0.45 lb/mmBtu (3-hr avg E301, E303, E304); 0.7 lb/mmBtu (3-hr avg, E302).
20.2.61 NMAC	Smoke and Visible Emissions		See Note	X	The SJGS are exempt/insignificant sources, but still must meet opacity limits per 20.2.61 NMAC. Note: Emergency Generators, E602, E603, E604, E605, E606
20.2.70 NMAC	Operating Permits	X		X	Source is major for NOx, CO, VOCs, SO ₂ , and Total HAPs.
20.2.71 NMAC	Operating Permit Fees	X		X	PTE is > 100 TPY, Source is major for NOx, CO, VOCs, SO2, Formaldehyde, and Total HAPs. Yes, this facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	X		X	This facility is subject to 20.2.72.200.A.2 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	X		X	All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.74 NMAC	Permits-Prevention of Significant Deterioration	Y		X	This facility is major for NOx, CO, TSP, PM10, PM2.5, VOC, and SO2. Source is one of the 28 listed – PTE > 100 tpy This is a minor modification to a major PSD source.
20.2.75 NMAC	Construction Permit Fees	X		X	This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance		See Note	X	This is a stationary source which is subject to the requirements of 40 CFR Part 60, as amended through September 1, 2002. Note: NSPS Subpart D for E301, E303, E304; NSPS OOO for certain limestone handling sources
20.2.84 NMAC	Acid Rain Permits		E301, E302, E303, E304	X	Requires SJGS to have an acid rain permit for the coal boiler units.
20.2.85 NMAC	Mercury Emissions Standards and Compliance Schedules for Electrical Generating Units	Y	E301, E302, E303, E304		Requires SJGS coal boiler units to comply with mercury emission provisions.
20.2.87 NMAC	Greenhouse Gases Emission Reporting	X			Requires SJGS to report annual greenhouse gas emission inventory.

Air Quality Bureau Permit No. 66M6R1	20.2.72NMA C Air Permit	X		X	The following parties shall be subject to the provisions of this part: Owners, operators, and designated representatives of affected sources and affected units, pursuant to §72.6 of this chapter; (b) Any new independent power producer as defined in section 416 of the Act and §72.2 of this chapter; (c) Each unit in SO ₂ emission (90% of the annual avg.) PM (0.015 lb/mmBtu, filterable 3-hr avg) NO _x (0.10 lb/mmBtu, 30 day energy conservation and Renewable Energy Reserve Program) technology with section 404(f) of the Act; (d) Any small
Title IV – Consent Acid Rain Decree 40 CFR 73	March 10, 2005 Sulfur Dioxide Compliance Decisions		E301, E302, E303, E304	X	
11.0 Federal Regulatory Analysis:					
FEDERAL REGULATIONS CITATION	Title	Applies to Entire Facility	Applies to Unit No(s).	Federally Enforce-able	JUSTIFICATION FOR USE:
40 CFR 50	NAAQS	X		X	Defined as applicable at 20.2.70.7.E.11, Any national ambient air quality standard
NSPS 40 CFR 60, Subpart A	General Provisions		See Note	X	Applies if any other NSPS subpart applies. Note: NSPS Subpart D for E301, E303, E304; NSPS OOO for certain limestone handling sources
NSPS 40 CFR60 Subpart D	Electric Utility Steam Generating Units		E301, E303, E304	X	Establishes NO _x , SO ₂ , PM (Method 5) and opacity limits of boiler units 1,3 and 4. NO _x limit is 0.7 lb/ mmBtu (3-hr avg); SO ₂ limit is 1.2 lb/mmBtu (3-hr avg) and TSP 0.1 lb/mmBtu (3-hr avg).
40 CFR 60, Subpart OOO	Non-metallic Minerals		E803, E804, S805	X	NSPS standards for non-metallic minerals applies to certain portions of the limestone handling system.
NESHAPS 40 CFR 64	Compliance Assurance Monitoring		E301, E302, E303, E304	X	CAM applies to boiler units because they are each major emission sources (>100 tpy) and employ control equipment to insure compliance with emission limits.
NESHAPS 40 CFR 68	Chemical Accident Prevention	X		X	An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115, 40 CFR 68. SJGS is potentially subject to chemical accident prevention assessment and planning.
Title IV – Acid Rain 40 CFR 72, Subparts B,D and I	Acid Rain		E301, E302, E303, E304	X	(a) Each of the following units shall be an affected unit, and any source that includes such a unit shall be an affected source, subject to the requirements of the Acid Rain Program: (1) A unit listed in table 1 of §73.10(a) of this chapter.(2) A unit that is listed in table 2 or 3 of §73.10 of this chapter and any other existing utility unit, except a unit under paragraph (b) of this section SJGS coal boiler units are subject acid rain permitting provisions and have an acid rain permit.

Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions		E301, E302, E303, E304	X	The following parties shall be subject to the provisions of this part: Owners, operators, and designated representatives of affected sources and affected units pursuant to §72.6 of this chapter; (b) Any new independent power producer as defined in section 416 of the Act and §72.2 of this chapter, except as provided in section 405(g)(6) of the Act; (c) Any owner of an affected unit who may apply to receive allowances under the Energy Conservation and Renewable Energy Reserve Program established in accordance with section 404(f) of the Act;(d) Any small diesel refinery as defined in §72.2 of this chapter, and (e) Any other person, as defined in §72.2 of this chapter, who chooses to purchase, hold, or transfer allowances as provided in section 403(b) of the Act. SJGS coal boiler units must hold sufficient annual SO2 allowances.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program		E301, E302, E303, E304	X	SJGS has filed a NOx averaging plan with EPA and submits required reports.
40CFR77 Excess Emissions	Excess emissions reporting		E301, E302, E303, E304	X	
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	X		X	SJGS is subject to this part for servicing motor vehicles.

12.0 Exempt and/or Insignificant Equipment that do not require monitoring:

Title V - INSIGNIFICANT ACTIVITIES (Dated March 24, 2005) as defined by 20.2.70.7.P NMAC:

No changes due to this permit action.

The Data Center Emergency generator is exempt since it provides power during periods of loss of commercial power.

13.0

NSR did not include **New/Modified/Unique Conditions** (Format: Condition#: Explanation):
 From NSR 0063M6R1
 Units S518/E518 and S519/E519 added to Specific Condition 1.a, Table 1.1 and Condition 1.j. Condition 1.j required baghouses on Units E505, E506, E518, E519 and E803; however there were no Monitoring, Recordkeeping or Reporting requirements to demonstrate compliance. Conditions 3.n and 4.t were added so PNM could demonstrate compliance. Unit E803 is considered exempt under NSR regulation and is a regulated piece of equipment under Title V since it is subject to 40 CFR 63 Subpart OOO.

14.0 For Title V action: Cross Reference Table between NSR Permit 0063M6R1 and TV Permit P062R2. NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:

NSR Changed by TV*	0063M63R1 NSR Condition #	P062R1M1 TV Section #
	1.a Revision and Operation – Regulated Equipment List	A104.A Process Equipment, and TV renewal application
	1.b continuous operation	NSR Unique
	1.c Applicable requirements	A103.C Applicable Requirements
	1.d Applicable requirements, NSPS Subpart D to Units E301, E303, and E304	A103.D Applicable Requirements
	1.e Applicable requirements, NSPS Subpart OOO for units that are a part of the limestone handling system.	A103.E Applicable Requirements
	1.f Applicable requirements, 20.2.14 20.2.31 and 20.2.32 NMAC for units E301-E304.	A103.F Applicable Requirements
	1.g Opacity Limits for Units E301-E304	A111, A106.J
	1.h Operational requirements: Must operate ESP until Baghouses are operational	A402.B ESP Operations
	1.i Operational requirements: For Road Areas	A406.A Road Area Operational Requirements
E518 and E519 not mentioned in TV	1.j Operational requirements: fly ash silo loading (E505, E506, E518, and E519) and limestone silo loading (E803)	A408.D Fabric Filter Operational Requirements: Emission Units E506 and E507 (fly ash silo loading) and E803 (limestone silo loading)
	1.k Operational requirements: coal pulverizers (E201)	A406.B Coal Pulverizer Requirements
XXX	1.l Operational requirements: emergency generators shall burn only No. 2 Diesel Fuel Oil	insignificant activities, removed from permit
	1.m Operational requirements: emergency generators operations	A403.A Emergency Generator Operating Hours Limits
	1.n Operational requirements: raw materials processing limits	A406.C Facility-Wide Raw Material Limits
	1.o Operational requirements: good air pollution control practices to minimize emissions	A406.D Miscellaneous Units Operational Requirements
	1.p Operational requirements: boiler baghouse requirements	A402.A ESP Operations
	1.q Operational requirements: ESP vs baghouse switch over.	A402.B ESP Operations
		A402.C CAM Rule Corrective Action Requirements
New language	1.r Operational requirements: Boilers – limestone scrubbers	A402.E LSFO Scrubber Operations
	1.s Operational requirements: duct leak management program on Units E501, E502, E503, and E504	A402.D Expansion Joint Maintenance Program (EJMP) Operational Requirements

NSR didn't include SO2 CEMS	1.t Operational requirements: NOx CEMS for Units E501, E502, E503, and E504	A400.B Acid Rain Program
New	1.u Operational requirements: Heat input to these boilers shall not increase as a result of installation of the low-NOx burners.	A402.F Operation Requirement
New	1.v Operational requirements: baghouse for each activated carbon silos	A408.A Operation Requirement
New	1.w Operational requirements: injection point of activated carbon.	A408.A Operation Requirement
New	1.x Operational requirements: activated carbon baghouse equipped and operated with a device to continuously monitor the pressure differential across the baghouse.	A408.B Operation Requirement
New	1.y Operational requirements: install, maintain, and operate mercury CEMS	A408.C Operation Requirement
XX	1.z Operational requirements: next significant revision (0063-M7) shall include condensable emissions and PM _{2.5} emissions.	Not in TV permit, NSR unique
EMISSION LIMITS		
	2.a Table 2.1. Maximum Allowable Individual Emissions for Units E301-E304	Table 106.A
	2.b Table 2.2. Maximum Allowable Combined Emissions for Units E301-E304	A106.B Emission Limits for E301-E304
New	2.c Table 2.3. Maximum Allowable Individual Emissions for Units E301-E304 after Effective dates from 1.g.	A106.C
	2.d Table 2.4. Maximum Allowable Emissions for Duct Leaks after Effective dates from 1.g.	A106.D Emission Limits for Boiler Duct Leaks
	2.e Table 2.5. Maximum Allowable Emissions for Non-Boiler Units.	A106.E Emission Limits for Non-Boiler Units
	2.f NOx Emission Limits, CEMS and 40 CFR 75	A106.F
	2.g SO ₂ Emission Limits, CEMS and 40 CFR 75	A106.G
	2.h PM ₁₀ Emission Limits IAW NSPS Subpart OOO	A106.H NSPS Emission Limits for Limestone Process Equipment
	2.i Opacity Limits for generators	A106.I Opacity Limits for Emergency Generators
	2.j Cooling Towers TDS Limits	A405.A Cooling Tower Operational Requirements
	1.g	A106.J Schedule to meet Opacity, PM, SO ₂ , and NOx emission limitations
New	2.k Activated Carbon baghouse silos designed and operated for no visible emissions.	A106.K; added language concerning mercury controls based on CD 9d.
New		A106.L Annual emission limits used for Title V Annual Fees
Monitoring Requirements		
	3.a Table 3.a Affected Units and applicable monitoring requirements	A103.C
		A400.A Acid Rain Program Monitoring
	3.b COMS for Units E301, E303, and E304 NSPS Subpart D	A402.G NSPS Subpart D Monitoring
		A402.H 20.2.31 NMAC SO ₂ Monitoring
	6.b	A402.I Periodic Stack Test Monitoring
	3.c COMs installation for Unit E302.	A402.G
New	3.d Pressure drop across fly ash baghouse	A408.D
	3.e Continuous pressure drop across baghouse for Boilers E301-E304.	A402.A Fabric Filter Monitoring
		A402.C CAM Monitoring
		A402.E SFO Scrubber Operations Monitoring

New	3.f Pressure drop across each activated carbon silo baghouse	A408.B
New	3.g Annual inspection of coal pulverizers	A406.B
	3.h Annual inspections of coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance.	A406.D NSPS Subpart OOO Monitoring
XXX	3.i operating hours of emergency generators.	insignificant activities, removed from permit
	3.j Quantities of coal, diesel fuel, and limestone processed.	A406.C
	3.k Quarterly measure TDS concentration of each cooling tower.	A405.A Cooling Tower Emissions Monitoring
New	3.l Daily-24-hr period coal flow to each boiler.	A406.C
New	3.m Continually monitor mercury emissions using CEMS	A408.C
New	3.n Pressure drop across baghouse for Units E505, E506, E518, E519, and E803.	A408.D
4. Recordkeeping		
	4.a Maintain records on-site for 5 years	B109.B
	4.b Table 4.1 Affected Units and applicable recordkeeping requirements	N/A
		A400.B Acid Rain Program Recordkeeping
		A103.D, A402.G NSPS Subpart D Recordkeeping
		A402.H 20.2.31 NMAC Recordkeeping
		A406.E NSPS Subpart OOO Recordkeeping
		A402.I Periodic Stack Test Recordkeeping
		A406.F Periodic Visual Monitoring Opacity Recordkeeping
	4.c Haul Roads	A406.A Road Area Recordkeeping
New	4.d Fly ash baghouse pressure drop, Units E701-E707	A408.D
	4.e Boiler baghouse pressure drop for Units E301-E304	A402.A Fabric Filter Recordkeeping
	4.f Activated carbon silo baghouse pressure drop for Units E901-E904.	A408.B
	4.g Manufactures documentation of pressure drop range for Units E901-E904.	A408.B
	4.h Manufactures documentation of design for PM control and baghouse exhaust flow for Units E901-E904.	A408.A
	4.i inspections of coal pulverizes	A406.B
	4.j Inspection records of coal pile maintenance, fly ash silo unloading to trucks, limestone delivery, and limestone pile maintenance.	A406.D
XX	4.k Monthly and 12-month total operating hours of each emergency generator.	insignificant activities, removed from permit
	4.l Quarterly quantities of coal, diesel fuel and limestone processed.	A406.C
	4.m Quarterly measure TDS concentration of each cooling tower. Calculate individual cooling tower emissions.	A405.A
	4.n Record of review of duct leak management practices.	A402.D
	4.o Calculate the 24-hour heat input value of each boiler.	A402.F
	4.p Records of "as-delivered" heat content of the coal.	A402.F
	4.q The 365-day rolling total heat input for each boiler.	A402.F
X	4.r After the low-NOx burner installation, record operational parameters used to achieve NOx limits for first 12-months of operation.	Task completed and not included.
	4.s Records of mercury CEMS outputs, calculation, any CEMS maintenance events for continual mercury emission rates.	A408.C
	4.t Pressure drop across fabric filters for Units E505, E506, E518, E519, and E803.	A408.D

		A402.C CAM Recordkeeping
		A402.E LSFO Scrubbers Operations
5. Reporting		
	5.a Table 5.1 Affected Units and applicable reporting requirements	A109
Completed task.	5.b Calculate and report Historical 12-month total heat input for each boiler, per 4.p and 4.q	Not included since task was completed.
	5.c Upon request, summarize and report 365-day rolling total heat input values for each boiler used in 4.q.	A402.F
		A402.I Periodic Stack Test Reporting
		A406.F Periodic Visual Monitoring of Opacity Reporting
		A402.C CAM Reporting
Compliance Test		
	6.a No new testing requirements	NSR Unique
	6.b Quarterly testing requirements for Boilers Units E301-E304	A402.I Periodic Stack Test Monitoring
	6.c PM ₁₀ and PM _{2.5} testing shall include condensables	A402.I
	6.d Actual PM ₁₀ and PM _{2.5} emission test every 5 th calendar quarter.	A402.I
	6.e PM ₁₀ testing is waived until test method established by USEPA.	A402.I
	6.f PM _{2.5} testing is waived until test method established by USEPA.	A402.I
	6.g Maintain CEMS IAW 40 CFR Parts 60 and 75	A402.I
	6.h Previous testing requirements are still in effect.	B111
	6.i Additional testing may be imposed	B111
	6.j Test schedule after startup and normal production	B111
	6.k For all periodic monitoring events, 90% load	B108 General Monitoring Requirements
	6.l Test Methods	B111
	6.m Upon request, provide temporary Teflon lines for compliance tests.	B111
	6. Compliance Test	B111

NSR conditions identified as “NSR Unique” do not establish any applicable requirements or federally enforceable conditions that require adoption in the TV operating permits.

15.0 Permit specialist’s notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.

15.1 In spring of 2009, the last of the Fly Ash Silo baghouses will be installed and the ESPs will not be energized any longer. The ESPs will physically be a wide spot in the duct work and allows slow TSP to fallout due to velocity slowing down. After the work is completed, all conditions in the NSR and TV permits related to ESP operation can be deleted.

15.2 7/14/10: following the conference call yesterday with PNM, Nancy Norem, Danny Kimball, Ralph Williams (consultant), and NMED, Joe Kimbrell, Ned Jerabek, Scott Vail, agreement was made that the CAM Plan Indicator #1 for the COMS setting would be reduced from 10% Opacity to 6.0% Opacity with COMS data submitted after an additional 12 months of collection. As the bags age up to a possible maximum age of 7 years, PNM doesn’t know the effects of age on the COMS readings. PNM or NMED will request changes as the data justifies. PNM and NMED agreed on the wording changes to the EJMP Condition A402.C.

15.3 7/14/10 added new Condition A402.I for Demister Operations based on requirements from the Demister Settlement Agreement.

15.4 7/22/10 see PNM comments to draft permit dated June 3, 2010 and NMED’s reply comments dated July 26, 2010. Many changes were made to the proposed permit due to these comments.

- 15.5 7/30/10 per agreement with PNM(conference call with PNM, Nancy Norem, Danny Kimball, Ralph Williams (consultant), and NMED, Joe Kimbrell), Units E602, E603, E604, E605, E606, and E607 (emergency generators) were removed from permit condition since there meet the definition of emergency generators and insignificant activities.
- 15.6 10/4/2010: Considering adding Compliance plan for submitting PSD netting analysis for NSR Permit 0063M4 that was issued 9/8/2006. May not be appropriate to do this in TV permit, since it has nothing to do with the facility being out of compliance and bring them back into compliance.



Jeremy Nichols <jnichols@wildearthguardians.org>

PNM- San Juan Generating Station

Kimbrell, Joseph, NMENV <joseph.kimbrell@state.nm.us>

Wed, Sep 22, 2010 at 11:34 AM

To: Jeremy Nichols <jnichols@wildearthguardians.org>, meisenfeld@frontier.net

Cc: "Jerabek, Ned, NMENV" <ned.jerabek@state.nm.us>, "Goodyear, Richard, NMENV" <richard.goodyear@state.nm.us>

Dear Jeremy,

I just wanted to let you know that the EPA 45-day review period has expired for the draft permit for the subject facility ending on Monday, September 20, 2010. After NMED responds to the EPA Record of Communication dated 9/20/2010, then it is the intension of NMED to proceed with the review process of the Title V renewal permit (P062R2) for the subject facility.

Sincerely,

Joe Kimbrell

Joseph W. Kimbrell, Air Permit Specialist, Advanced
NMED Air Quality Bureau
1301 Siler Road, Bldg B, Santa Fe, NM 87507-3113
(505) 476-4300 fax (505) 476-4375, direct # 476-4347

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May 7, 2010

New Mexico Environment Department
Air Quality Bureau
Operating Permit Unit
1301 Siler Rd., Bldg. B
Santa Fe, NM 87507

Re: Comments on Draft Title V Permit for Public Service Company of New Mexico's ("PNM's") San Juan Generating Station, San Juan County, NM, Permit No. P062R2

To Whom It May Concern:

WildEarth Guardians, San Juan Citizens Alliance, and Carson Forest Watch submit the following comments in response to the New Mexico Environment Department's ("NMED's") proposal to renew a Clean Air Act Title V operating permit allowing Public Service Company of New Mexico ("PNM") to continue operating the San Juan Generating Station (Operating Permit No. P062R2), located in San Juan County, New Mexico.

The San Juan Generating Station is a massive coal-fired power plant. The facility consists of four coal-fired boilers. The facility releases over 80,000 tons of toxic air pollution, including more than 24,000 tons of smog-forming nitrogen oxide ("NO_x") gases, 1,700 tons of particulate matter less than 10 microns in diameter ("PM₁₀"), and more than 74 tons of hazardous air pollutants such as hydrochloric acid, mercury, hydrofluoric acid, and benzene. *See* Draft Title V Permit at 4 and 11-12. According to data submitted with the U.S. Environmental Protection Agency's ("EPA's") Clean Air Markets Division, the facility also releases 11,881,245.5 tons of carbon dioxide annually.

For the foregoing reasons, NMED must deny PNM's application for a renewed Title V Permits due to its failure to ensure compliance with applicable requirements under the Clean Air Act.

1. The Title V Permit Fails to Address Greenhouse Gas Emissions to Assure Compliance with PSD

In proposing to issue the Title V Permit, it appears that the NMED has not assessed whether carbon dioxide ("CO₂"), key greenhouse gas, is subject to regulation in accordance with

PSD requirements and therefore failed to ensure compliance with PSD under the Clean Air Act, PSD regulations, and the New Mexico SIP. This is of concern given that the San Juan Generation Station is the largest source of greenhouse gases regulated by NMED, annually releasing nearly 12 million tons of carbon dioxide.

As New Mexico itself has noted, greenhouse gases, such as carbon dioxide and methane, are subject to regulation under PSD regulations. In accordance with those regulations, any source that emits more than 250 tons per year “of any air pollutant subject to regulation under the Federal Act” is subject to PSD permitting requirements, including the requirement that Best Available Control Technology (“BACT”) be utilized to keep air emissions in check. *See* 40 CFR § 51.166(j)(2). Similarly, these regulations require that any major source that undergoes a modification leading to a significant emissions increase is also required to utilize BACT. The Clean Air Act makes clear that the BACT requirements extend to “each pollutant subject to regulation” under the Act. 42 USC § 7479(3) and 40 CFR § 52.21(b)(12). In this case, it appears the NMED failed to determine whether the Title V Permit ensures compliance with PSD requirements under the Clean Air Act and PSD regulations in relation to CO₂ emissions from the San Juan Generating Station.

NMED has taken the position that PSD requirements apply to any source that emits more than 250 tons/year of CO₂ and, by extension, any source that emits more than 250 tons/year of methane. In briefs submitted in appeal of the Desert Rock power plant, New Mexico explained:

The [Clean Air] Act requires EPA to conduct a BACT analysis and set an emission limit for “any regulated pollutant” before issuing the PSD permit. CO₂ is a regulated pollutant under the Act. Failure to conduct modeling and a BACT analysis for CO₂ violates the requirements of the Act and constitutes a clear legal error.

See State of New Mexico’s Petition for Review and Supplemental Brief in Re: Desert Rock Energy Company, LLC at 30.¹ To this end, NMED must assess greenhouse gas emissions from the San Juan Generating Station to ensure that the facility is in compliance with PSD and Title V permitting requirements.

The need to assess greenhouse gas emissions in order to ensure the Title V Permit assures compliance with applicable requirements is especially critical in the case of the San Juan Generating Station. The Statement of Basis indicates that a number of permitting actions allowing construction and modifications of the coal-fired boilers have been undertaken since 1973, likely leading to significant increases in CO₂ emissions. There is no indication that NMED assessed greenhouse gas emissions as part of those permitting actions, meaning NMED has no basis to conclude that the San Juan Generating Station is in compliance with applicable requirements, or that the Title V Permit ensures compliance with applicable requirements.

2. Certain Emission Limits Appear Unsupported by any Ambient Air Quality Impacts Analysis as Required by the SIP

¹ This brief is attached to these comments as Exhibit 1.

We are concerned that it appears the applicable NO_x and particulate matter emission limits have not been established based on an analysis of ambient air quality impacts, as required by the New Mexico SIP at NMAC 20.2.72.208.D. This provision states that NMED shall deny any permit for construction, modification, or revision if it would “cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico Air Quality Standard unless the ambient air impacts is offset by meeting the requirements of either 20.2.29 NMAC or 20.2.72.216 NMAC[.]” In this case, it is not apparent that NMED assessed the NO_x and particulate matter emission limits specifically to ensure that the San Juan Generating Station would not cause or contribute to exceedances of the ozone and PM_{2.5} National Ambient Air Quality Standards (“NAAQS”). This is particularly of concern in light of the fact that several permit modification have recently been undertaken, meaning NMED had an affirmative duty to ensure the permit limits would protect the NAAQS in accordance with its SIP.

Finally, are concerned that the Title V Permit does not include emission limits for PM_{2.5}, or any condensable particulate matter for that matter. The Title V Permit and Statement of Basis indicates that such limits will be established at a later date, yet if applicable requirements currently require the San Juan Generating Station to comply with PM_{2.5} and condensable particulate matter limits, such limits must be included in the Title V Permit. As a threshold matter, NMED cannot ensure that the San Juan Generating Station will protect the PM_{2.5} NAAQS without incorporating limits on PM_{2.5} emissions and condensable particulate matter.

3. Startup, Shutdown, and Malfunction Exemptions for Opacity Limits are Contrary to Applicable Requirements

The draft Title V Permit at Condition A106.C indicates that opacity limits can be exceeded during startup, shutdown, and malfunction for coal-fired Units 1, 2, 3, and 4. Such a blanket exemption to emission limits is wholly inappropriate and contrary to applicable requirements. Although we understand that such an exemption may be allowed under the San Juan Generating Station Consent Decree, such an exemption is contrary to applicable requirements and therefore cannot be incorporated into this Title V Permit. Furthermore, because the Title V Permit indicates that opacity limits are being used as indicators of particulate emissions in accordance with the compliance assurance monitoring plan, it is further inappropriate to allow exemptions during startup, shutdown, and malfunction. As a practical matter, this means that the Title V Permit likely fails to ensure compliance with applicable particulate matter emission limits.

At a minimum, the Title V Permit fails to incorporate reporting requirements set forth in the Consent Decree to ensure that any startup, shutdown, and malfunction exemption set forth for opacity is not abused. These reporting requirements are set forth under Section V(9)(a)(vi) and require, among other things, that PNM shall notify NMED of any excess opacity reading caused by startup, shutdown, and malfunction by facsimile no later than 24-hours after the start of the next business day and in writing no later than 10 calendar days after the start of the first business

day following the reading. The Title V Permit must include these excess emission monitoring requirements from the Consent Decree.

4. The Title V Permit Fails to Require Prompt Reporting of Deviations

Condition 5.1.2 of the draft Title V Permit requires reporting of permit deviations only once every six months. This does not constitute prompt reporting of permit deviations, as required by Title V regulations.

Prompt reporting is typically defined “in relation to the degree and type of deviation likely to occur and the applicable requirements.” 40 CFR § 70.6(a)(3)(iii)(B). In explaining the meaning of “prompt,” the House Report for the CAA Amendments of 1990 stated that “the permittee would presumably be required to report that violation without delay.” H.F. Rep. No. 101-490, pt. 1, at 348 (1990). In commenting on other proposed state operating permit programs, the EPA has explained:

In general, the EPA believes that ‘prompt’ should be defined as requiring reporting within two to ten days for deviations that may result in emissions increases. Two to ten day is sufficient time in most cases to protect public health and safety as well as to provide a forewarning of potential problems.

Clean Air Act Proposed Interim Approval of Operating Permits Program: State of New York, 61 Fed. Reg. 39617-39602 (July 30, 1996). Most recently, the second circuit court of appeals held that “prompt” for purposes of prompt reporting of permit deviations must at least be less than every six months depending upon the source’s compliance history and public health risk. *NYPIRG v. Johnson*, 427 F.3d 172 (2nd Cir. 2005). Clearly, reporting permit deviations only once every six months does not constitute prompt reporting.

Currently, Condition B110.C only requires semiannual reporting of deviations—or once every six months, regardless of the nature of the deviation. Clearly this does not constitute prompt reporting. It would make sense for NMED to require written reporting of permit deviations related to emission limits at least within two to ten days so that public health and safety can be protected and the applicable requirements can be met. NMED must also ensure that any other deviations are reported promptly in accordance with applicable requirements. We request NMED assess both the compliance history and the public health risks associated with the San Juan Generating Station when determining what constitutes prompt in the context of this Title V Permit.

5. The Draft Title V Permit Fails to Require Sufficient Periodic Monitoring

Permitting authorities must ensure that a Title V Permit contain monitoring that assures compliance with the terms and conditions of the permit. *See* 42 USC § 7661c(c) and 70.6(c)(1). Although as a basic matter, Title V Permits must require sufficient periodic monitoring when the underlying applicable requirements do not require monitoring (*see* 40 CFR § 70.6(a)(3)(i)(B)),

the D.C. Circuit Court of Appeals has firmly held that even when the underlying applicable requirements require monitoring, permitting authorities must supplement this monitoring if it is inadequate to ensure compliance with the terms and conditions of the permit. As the D.C. Circuit recently explained:

[40 CFR § 70.6(c)(1)] serves as a gap-filler...In other words, § 70.6(c)(1) ensures that all Title V permits include monitoring requirements “sufficient to assure compliance with the terms and conditions of the permit,” even when § 70.6(a)(3)(i)(A) and § 70.6(a)(3)(i)(B) are not applicable. This reading provides precisely what we have concluded the Act requires: a permitting authority may supplement an inadequate monitoring requirement so that the requirement will “assure compliance with the permit terms and conditions.”

See Sierra Club v. EPA, 536 F.3d 673, 680 (D.C. Cir. 2008). In other words, “a monitoring requirement insufficient ‘to assure compliance’ with emission limits has no place in a permit[.]” *Id.* at 677.

In this case, the draft Title V Permit fails to contain monitoring requirements that ensure compliance with underlying particulate matter limits for the four coal-fired boilers. The Title V Permit establishes particulate limits, including for the coal-fired boilers at Condition A106.A, setting forth pound per hour emission limits, ton per year emission limits, and pound per million btu emission limits. Unfortunately, the prescribed monitoring fails to ensure compliance with these emission limits.

Specifically, the draft Title V Permit provides for monitoring that is too infrequent to ensure continuous compliance with the annual, hourly, pound per million btu emission rates. The Title V Permit only requires once/quarter testing for particulate matter emissions, which can hardly serve to ensure compliance with the hourly and pound per million btu emission limits. Furthermore, monitoring only once per quarter can hardly serve to provide reliable data representative of the source’s compliance status with regards to the annual emission limits.

Furthermore, to the extent the Title V Permit relies on compliance assurance monitoring (“CAM”) requirements to meet particulate matter emission limits, it is unclear how meeting CAM will ensure compliance with applicable particulate matter limits. Of particular concern is that there is no support for the proposed opacity trigger points for corrective action and excursions set forth at Table 402.C at Condition A402.C. There is no indication that meeting these trigger points will ensure compliance with the applicable particulate matter limits. We are also concerned that the Title V Permit allows the opacity trigger points to be changed through administrative permit amendment.² Administrative permit amendments are only allowed in narrow circumstances, such as where typographical errors are being corrected, where addresses are changed, or where monitoring is to become more frequent. It does not appear that an administrative permit amendment is the proper procedure for altering the opacity trigger points under the CAM requirements in the Title V Permit.

² Condition A406.C specifically states that the permittee may use the administrative amendment procedures of 20.2.70.404.A(1)(e) NMAC to change the CAM trigger points in Table 3.3.12. Although there is no Table 3.3.12 in the draft Title V Permit, we assume that this refers to Table 402.C.

Finally, the draft Title V Permit appears to exempt monitoring altogether for particulate matter. Condition B108.D states that monitoring may be foregone altogether for two monitoring periods if Units 1, 2, 3, or 4 have operated for less than 25% of a monitoring period, and may even be foregone for a longer period of time if Units 1, 2, 3, or 4 operate for less than 10% of any monitoring period. This Condition is problematic. As a practical matter, it allows the San Juan Generating Station to forego particulate matter monitoring altogether if Units 1, 2, 3, or 4 operate less than 25% of a monitoring period. This can hardly serve to ensure compliance with the applicable particulate matter emission limits.

We are also concerned that the Title V Permit fails to require any monitoring of emissions related to duct leaks from Units 1-4. The Title V Permit expressly limits emissions of NO_x, SO₂, carbon monoxide, and particulate matter from duct leaks at Condition A106.D. However, no the Title V Permit actually sets forth no explicit monitoring of such emissions to ensure compliance. Although the Title V Permit requires a duct leak management program, it is unclear exactly what this program entails and how it will ensure compliance with the emission limits for duct leaks. The Title V Permit states that compliance with the duct leak management program will be determined “using data generated by the monitoring and by Department inspections of the units,” but it is unclear exactly what monitoring data will be generated and what NMED will inspect to ensure compliance. Not only is the duct leak management program vague, it does not appear as if any specific standards exist to ensure that any duct leak management program is implemented to ensure compliance with applicable emission limits. We are particularly troubled at the fact that there are no limits on the number of leaking ducts, or leaking points along any ducts.

6. Condition B112.E Must be Removed or Revised

Condition B112.E states that “For sources that have submitted air dispersion modeling that demonstrated compliance with federal ambient air quality standards, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed in compliance with federal ambient air quality standards (40 CFR 50 NAAQS).” This Condition implies that compliance with the Title V Permit automatically means that the NAAQS will be protected.

This Condition is inappropriate. NMED cannot automatically conclude that compliance with a Title V Permit assures compliance with the NAAQS. The agency must first prepare an analysis and assessment of emissions to make such a finding, and even then must do so on a source-by-source basis, both individually and cumulatively. Furthermore, because the NAAQS are revised every five years (*see* 42 USC 7409(d)(1)), it is further inappropriate given that permit terms and conditions rarely are revised. Finally, the Title V Permit cites “40 CFR 50 NAAQS” as authority for this Condition. Regulations at 40 CFR § 50 provide no authority for this Condition, meaning it must be removed.

7. The Title V Permit Fails to Ensure Compliance with Section 112(j) of the Clean Air Act

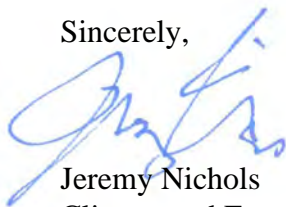
The draft Title V Permit fails to assure compliance with section 112(j), 42 USC § 7412(j), of the Clean Air Act. In particular, the Title V Permit fails to assure compliance with case-by-case maximum achievable control technology (“MACT”) requirements for the electric utility steam generating unit (“EGU”) in operation at the Cherokee coal-fired power plant.

Indeed, the Title V Permit fails to assure compliance with Section 112(j) in the context of mercury and other HAP emissions from the EGU in operation at the San Juan Generating Station. The facility is a major source of HAPs. On February 8, 2008, the D.C. Circuit Court of Appeals held that the EPA had inappropriately delisted EGUs from the list of sources whose emissions are regulated under Section 112 of the Clean Air Act. In light of this ruling, as well as the EPA’s failure to promulgate a MACT standard for EGUs, NMED was required to develop a case-by-case MACT for the EGU in operation at the San Juan Generating Station and to include such case-by-case MACT in the Title V Permit. Such a case-by-case MACT was required to include mercury emission limits, as well as limits for other HAPs regulated under Section 112 of the Clean Air Act, such as hydrofluoric acid, hydrochloric acid, and benzene.

Although it may be argued that Section 112(j) simply does not apply to EGUs on the basis that they may not be subject to the schedule for MACT promulgation set forth under Section 112(e)(1) or (3) due to the fact that they were added as a source category under Section 112 subsequent to the Clean Air Act Amendments of 1990, this argument makes little sense. For one thing, Section 112(e)(1) and (3) specifically reference Section 112(c)(1), which explicitly provides that the list of source categories promulgated under Section 112 may be periodically revised. Section 112(c)(5) of the Clean Air Act sets forth the standards for listing new source categories, as provided for under Section 112(c)(1), and sets forth deadlines for MACT promulgation for new sources. Taken together, Section 112(j)’s reference to Section 112(e)(1) and (3), which in turn references Section 112(c)(1), appears to strongly indicate that Section 112(j) requirements were meant to apply to new source categories listed under Section 112(c)(1) in accordance with Section 112(c)(5). To that end, it would make little sense in light of the purpose of Section 112(j), which is to ensure that all major sources of toxic pollutants meet strict regulatory standards, even when issuance of national MACT standards are delayed, to allow newly added source categories to somehow escape the application of Section 112(j).

Thank you for the opportunity to comment.

Sincerely,



Jeremy Nichols
Climate and Energy Program Director
WildEarth Guardians
1536 Wynkoop, Suite 301
Denver, CO 80202

(303) 573-4898 x 1303
jnichols@wildearthguardians.org

Mike Eisenfeld
New Mexico Energy Coordinator
San Juan Citizens Alliance
Farmington, NM
(505) 360-8994
meisenfeld@frontier.net

Joanie Berde
Carson Forest Watch
Box 15
Llano, NM 87543
joanieberde@yahoo.com

cc: EPA Region 6

**RECORD OF
COMMUNICATION**

September 20, 2010

To: Joseph Kimbrell
Title V Permits Engineer
New Mexico Environment Department
Air Quality Bureau

From: Catherine Penland
Air Permits Section (6PD-R)
EPA – Region 6

RE: Federal Part 70 Operating Permit to

Summary of Communication

Below are preliminary comments to the PN-draft of the Title V Operating Permit to Public Service Company of New Mexico; San Juan Generating Station, Permit No. P062R2 – permit renewal.

1. At this time, I continue to have serious concerns that this source may be PSD applicable, despite your replies to my earlier questions on 1) PSD analysis, claiming summary judgement on 2 of the 4 boilers (#3 and #4) at this site in Federal Court on Consent Decree that they are not (no mention is made of the other 2 boilers, i.e., Units #1 and #2); in addition to 2) a more recent response on no collateral increase in CO emissions from the Consent Decree required Low NOx burner installations on each of the boilers.

NMED provided Court documents on the first subject, but there does not appear to be enough information in them on the “EPA” finding of non-PSD applicability to make a determination on this subject. I cannot locate any supporting records at R6 for this finding, and in a telephone communiqué with Ned Jerabek and you on 9/20/10, Ned indicated there may not be any records of the phone conversation at your Agency either. There are two phases of PSD applicability that occurred during construction phases of this source, and the material presented so far on “commencement of construction” from this action, our records including previous applications from this source, the Court records provided, and your clarifications indicate numerous discrepancies on construction dates for at least the #1, #3 and #4 boilers at this plant. With the question remaining unanswered on PSD applicability analysis, and to verify past PSD applicability, we request a copy of all records in the NMED permit file for this source. Please forward as soon as possible.

2. All 4 boilers (Units #1 through #4) were modified under NSR with low NOx burners in 2006, which need an NSPS and a PSD analyses. Please provide the

emission calculations indicating actual to projected actual emission increases, per the definition in 40 CFR 51.165, for emission increases for this modification.

3. Whitepaper 1 has discussed the process for handling possible PSD/NSR violations prior to issuance of a Title V permit. Even though White Paper 1 states that companies “are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications.”¹ it continues, “EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the Part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper 1, part II, section H.

Since the Title V permits must have all applicable requirements, NMED must first determine if there is a violation of the SIP/PSD rules. The record should clearly address why NMED did not consider or re-evaluate the PSD applicability of Boilers 1, 3 and 4 for this action, since the emissions are far above the major source determinations, and construction appears to have commenced (by some conflicting dates, as previously noted) after the Federal PSD applicability dates.

4. There are corrections needed in the Statement of basis, such as the firing rates for boilers E303 (Unit #3) and E304 (Unit #4). Please make sure there is consistency in the permit and statement of basis on the emission units’ data.
5. Please indicate if a PSD analyses was performed for the installation of the limestone scrubber, noting the increase in sulfuric acid mist.
6. EPA notes that the PM 2.5 rates are based on filterable particulate matter. Why were these rates not revised to reflect condensable particulate matter? Also, how does setting TSP=PM10=PM2.5 emission rates for limitations in this proposed permit meet existing permit limitations guidance for either NSR or Title V, which is based on PTE? I.e., :
<http://www.epa.gov/region07/air/title5/t5memos/ptememo.pdf>
7. The statement of basis and public notice should indicate the change in emissions in the permit being modified/renewal – 40 CFR 70(h)(2).

^{1 4}. See Sept 30, 1999 memorandum from Eric Schaffer to Air Branch Chiefs, Region 1-9 et al. White Paper I further states, “However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper I, part II, section H.

8. Comment was made by WEG that the Title V permit failed to require prompt reporting of deviations. NMED responded with reference to conditions that prompt reporting in the Title V is tied to semi-annual reports required in Section A109 of the permit. Semi-annual reports are not “prompt” reporting. The reporting requirement for deviations should be tied to the reporting requirements under 20.2.7 NMAC. However, I could not find a link in the permit with the term “excess” for “deviations”, which would tie reporting to this SIP requirement. Please explain how deviations should be “promptly” reported outside Title V general semi-annual reporting requirements for all monitoring activities.
9. The CAM plan requires quarterly tests for PM determination. Can you make those tests co-related to the specific parameters (pressure drop) or efficiency of the fabric filters or the COMS at the units? This would better indicate parametric monitoring for compliance with the hourly pounds per hour limit. Otherwise, the frequency of quarterly tests do not specifically demonstrate “practical enforceability” with short term limits.
10. If this source is a base-load unit, subject to Acid Rain permit, why are “CEMs not required by any EPA or State regulation applicable to the source”, per answer to WEG comment on frequency of monitoring PM emission limitations? At the levels of emissions from this source, base-load units require CEMs, per Acid Rain permits.
11. Measure 402.B exempts SS for compliance with COMs, but state maintenance is a good part of compliance equation, which is also a part of CAM for compliance for boilers. No other conditions are referenced for compliance with the conditions for SSM. The source must meet limitations during all periods of operations, including periods of SSM, and these conditions must be addressed in the permit, without exemption from monitoring.

We have a number of unresolved concerns with this draft permit. Many of our concerns are related to the historical discrepancies in the permitting history of this facility. Other concerns include omission of requirements for SSM in underlying NSR permits, applicable CEMs monitoring, prompt reporting of deviations, and reconsideration on appropriate PTE limitations development for PM10 and PM2.5 emission rates. We request that NMED provide EPA information related to this review, prior to your recommendations to issue this permit. We would be happy to work with you to address our concerns. Please call me at 214- 665-7122.



Jeremy Nichols <jnichols@wildearthguardians.org>

PNM- San Juan Generating Station

Penland.Catherine@epamail.epa.gov <Penland.Catherine@epamail.epa.gov>

Fri, Oct 15, 2010 at 12:34 PM

To: jnichols@wildearthguardians.org
Cc: Robinson.Jeffrey@epamail.epa.gov

Mr. Nichols,

Please find attached the copy of the comments we sent NMED on 9/20/2010 (date of file name is date began set up of official ROC, not date sent). If you have any questions, please feel to call me. I'm currently working from home, and my number here is 817-858-0418. I'll be back in the office on Monday. My work number is below.

Cathy

Catherine G. Penland
EPA Region 6 - 6PD-R
Phone: (214) 665-7122
Fax: (214) 665-6762
penland.catherine@epa.gov

----- Forwarded by Catherine Penland/R6/USEPA/US on 10/15/2010 01:27 PM -----

Fw: PNM- San Juan Generating Station**Jeffrey Robinson**

to: Catherine Penland

10/15/2010 01:12 PM

Can you send Jeremy a copy of your ROC to NMED on San Juan.

----- Forwarded by Jeffrey Robinson/R6/USEPA/US on 10/15/2010 01:11 PM -----

From: Jeremy Nichols <jnichols@wildearthguardians.org>
To: Jeffrey Robinson/R6/USEPA/US@EPA
Date: 10/15/2010 12:05 PM
Subject: Fwd: PNM- San Juan Generating Station

[Quoted text hidden]

**ROC-09-15-10(P062R2).doc**

44K

**RECORD OF
COMMUNICATION**

September 20, 2010

To: Joseph Kimbrell [[Reply to Comments dated 10/29/2010, accompanied with revised permit and statement of basis.](#)]

Title V Permits Engineer
New Mexico Environment Department
Air Quality Bureau

From: Catherine Penland
Air Permits Section (6PD-R)
EPA – Region 6

RE: Federal Part 70 Operating Permit to

Summary of Communication

Below are preliminary comments to the PN-draft of the Title V Operating Permit to Public Service Company of New Mexico; San Juan Generating Station, Permit No. P062R2 – permit renewal.

1. At this time, I continue to have serious concerns that this source may be PSD applicable, despite your replies to my earlier questions on 1) PSD analysis, claiming summary judgement on 2 of the 4 boilers (#3 and #4) at this site in Federal Court on Consent Decree that they are not (no mention is made of the other 2 boilers, i.e., Units #1 and #2); in addition to 2) a more recent response on no collateral increase in CO emissions from the Consent Decree required Low NOx burner installations on each of the boilers.

NMED provided Court documents on the first subject, but there does not appear to be enough information in them on the “EPA” finding of non-PSD applicability to make a determination on this subject. I cannot locate any supporting records at R6 for this finding, and in a telephone communiqué with Ned Jerabek and you on 9/20/10, Ned indicated there may not be any records of the phone conversation at your Agency either. There are two phases of PSD applicability that occurred during construction phases of this source, and the material presented so far on “commencement of construction” from this action, our records including previous applications from this source, the Court records provided, and your clarifications indicate numerous discrepancies on construction dates for at least the #1, #3 and #4 boilers at this plant. With the question remaining unanswered on PSD applicability analysis, and to verify past PSD applicability, we request a copy of all records in the NMED permit file for this source. Please forward as soon as possible.

[NMED-JKimbrell] Per conversation between Jeff Robinson, EPA and Mary Uhl, NMED-AQB, NMED will not forward the requested documents at this time.

2. All 4 boilers (Units #1 through #4) were modified under NSR with low NO_x burners in 2006, which need an NSPS and a PSD analyses. Please provide the emission calculations indicating actual to projected actual emission increases, per the definition in 40 CFR 51.165, for emission increases for this modification.

[NMED-JKimbrell] As discussed in the telephone call on 9/20/2010 with Cathy Penland, Ned Jerabek, and Joe Kimbrell, NMED did re-evaluate the CO emission increase/decrease associated with the project to install low NO_x burners that were authorized by NSR permit 0063M3 and required by the Consent Decree. PNM did not request any increase in allowable CO emission limits to accommodate the installation of the low NO_x burners. Quarterly CO emissions test using EPA Method 10 demonstrate that the emission limits that were established prior to the installation of the low NO_x burners have not been violated.

In the NSR Permit 0063M2 issued January 22, 1997, the CO emissions for the four boilers were calculated using AP-42 emissions factors correlating to the type operation at SJGS. That emission was and still is 0.5 lbs of CO per ton of coal combusted. Since the rate of combustion was different for the units, the corresponding CO emission limits were: Unit 1 (E301) 92.9 lbs/hr; Unit 2 (E302) 95.4 lbs/hr, Unit 3 (E304) 144.2 lbs/hr, and Unit 4 (E304) 141.5 lbs/hr. These CO limits were required in the Title V permit P062-R1 issued February 4, 2005. Under Title V requirements PNM was required to perform initial compliance testing of CO using EPA Method 10 within six months following the issuance of Permit P062R1. This testing was to verify for the first time that the CO emission limits were adequately set to represent this facility.

PNM conducted the first CO test in May 2005, resulting in CO emission rates far exceeding permit limits. PNM, using the CO test results submitted an application to modify the permit to account for the existing, “before now” unknown emission rates to better reflect the actual facility conditions. Additional CO testing in July 2005, redistributed the requested CO increases to the levels permitted today: Unit 1 (E301) 3,000 lbs/hr; Unit 2 (E302), Unit 3 (E304), and Unit 4 (E304) 2,000 lbs/hr.

The CO emission limits currently permitted were first established by NSR Permit 0063M3 dated September 20, 2005. These CO emission increases were not due to any modification of the facility and did not trigger a PSD analysis.

Permit 0063M4 dated September 18, 2006 which authorized the installation of the low NO_x burners did not alter or change the CO emission limits for the facility. The facility is currently in compliance with the CO emission limits.

The question was asked, “Why is there such a large discrepancy between the CO emission rates based on AP-42 emission factors and those from the emission tests if these increased emissions were not due to facility modifications?” AP-42 emission factors were established to represent emissions for the average population of facility surveyed by

EPA. Facilities as large as SJGS are custom built and only through actual emission testing can anyone know what the true emissions are.

On October 4, 2010, we re-evaluated the PSD applicability of the Installation of the Low NOx Burner via NSR Permit 0063M4, issued 9/18/2006.

- PNM didn't request an increase in the allowable CO limits to accomplish the installation of the Low NOx Burners.
- However, PSD regulations require the comparison of past actuals to future projected actuals when determining if a project is significant or not. PNM in effect stated in the 0063M4 permitting process that the future potential actuals from the Low NOx Burner Installation was not going to be different from past actuals.
- Now that all of the Low NOx Burners have been installed (last unit became operational on 3/31/2009), we are now able to compare CO emission past actuals with future actuals for the Low NOx Burner Project. A comparison of the Quarterly CO Test results from May, 2006 which is prior to the installation of the Low NOx Burners to the Quarterly Test results from 2010 which is after the last Unit was retrofitted with the Low NOx Burners is shown here.

3-run avg	Past Actuals Pre-Low Nox Burner installation May 15-17, 2006			
	Unit 1	Unit 2	Unit 3	Unit 4
CO (lb/MMBtu)	0.757	0.098	0.033	0.137
CO (lb/hr)	2164.4	331.2	152.1	629.7
CO (tpy)	9480.1	1450.7	666.1	2758.1

3-run avg	Future Projected Actuals Post-Low Nox Burner installation			
	6/15/2010 Unit 1	4/21/2010 Unit 2	8/24/2010 Unit 3	5/27/2010 Unit 4
CO (lb/MMBtu)	0.634	0.523	0.2	0.326
CO (lb/hr)	2215	1760	1201.9	1804.8
CO (tpy)	9701.7	7708.8	5264.3	7905.0

Increase in Actuals due to Low Nox Burner Installation	Unit 1	Unit 2	Unit 3	Unit 4
	CO (lb/MMBtu)	-0.123	0.425	0.167	0.189
CO (lb/hr)	50.6	1428.8	1049.8	1175.1
CO (tpy)	221.6	6258.1	4598.222	5146.924

- This comparison clearly shows that all four units individually and combined exceed the 100 tons/year increase threshold for CO PSD significance. Therefore, it is our conclusion that NSR Permit 0063M4 should have been a PSD Permit or processed as a PSD permit.
- It is our intent to add a Compliance Plan in the current Title V Permit P062R2 for PNM to submit a PSD application to address the significant increase in CO from the construction of the low NOx Burners.

3. Whitepaper 1 has discussed the process for handling possible PSD/NSR violations prior to issuance of a Title V permit. Even though White Paper 1 states that companies “are not federally required to reconsider previous applicability determinations as part of their inquiry in preparing part 70 permit applications.”¹ it continues, “EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the Part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper 1, part II, section H.

Since the Title V permits must have all applicable requirements, NMED must first determine if there is a violation of the SIP/PSD rules. The record should clearly address why NMED did not consider or re-evaluate the PSD applicability of Boilers 1, 3 and 4 for this action, since the emissions are far above the major source determinations, and construction appears to have commenced (by some conflicting dates, as previously noted) after the Federal PSD applicability dates.

[NMED-JKimbrell] NMED has updated the History Table for each NSR permitting action in the DBS showing the PSD determination. NMED has re-evaluated the CO PSD applicability for Units 1, 3, and 4 as we discussed in Comment 2.

4. There are corrections needed in the Statement of basis, such as the firing rates for boilers E303 (Unit #3) and E304 (Unit #4). Please make sure there is consistency in the permit and statement of basis on the emission units’ data.

[NMED-JKimbrell] Corrections were made. As shown in the permit the firing rate was shown as 5758 MM Btu/hr for E303 and 5649 MM Btu/hr for E304. These values were updated in the Statement of Basis Summary (DBS) on pages 5 and 6, and verified to be correct in the Tempo Database.

5. Please indicate if a PSD analyses was performed for the installation of the limestone scrubber, noting the increase in sulfuric acid mist.

[NMED-JKimbrell] It is unclear where EPA found any reference to an increase in sulfuric acid mist in any of the Permit documents for permitting action P062R2. There is no mention of an increase in sulfuric acid mist in the Permit file for NSR Permit 0063M2 issued January 22, 1997. Emissions from sulfuric acid mist were not considered in the NSR application or permit process since it was not an issue for the following assumed

^{1 4}. See Sept 30, 1999 memorandum from Eric Schaffer to Air Branch Chiefs, Region 1-9 et al. White Paper I further states, “However, EPA expects companies to rectify past noncompliance as it is discovered. Companies remain subject to enforcement actions for any noncompliance with requirements to obtain a permit or meet air pollution control obligations. In addition, the part 70 permit shield is not available for noncompliance with applicable requirements that occurred prior to or continues after submission of the application.” White Paper I, part II, section H.

reasons, 1) Most coal mined in New Mexico is considered to be low sulfur content coal, 3.7 percent. 2) The NSR action removed a sulfuric acid production plant so to purchase their required 90 percent solution of sulfuric acid instead of manufacturing it themselves. The sulfuric acid storage tanks are insignificant activities for Title V purposes. 3) The existing SO₂ control technology of the Wellman-Ford system with a limestone system drastically improved the SO₂ removal efficiency (a reduction of ~6,700 tons per year), which directly reduces the level of sulfuric acid mist that may or may not be formed.

In the permitting process for NSR Permit 0063M2, PSD analyses considered PM, SO₂ and NO_x. See PDF copy of the Emission Netting Calculation section 6.0 of the application. NO_x was not affected by the project since it didn't affect the boilers. SO₂ emissions significantly decreased, 6,907 tons per year. PSD netting was performed for particulate matter emissions (PM₁₀ and TSP). The project was significant for PM and PSD Netting was accomplished resulting in the PM net emissions being below the PSD PM Threshold of 10 ton per year increase for PM₁₀ or 25 tons per year for TSP. The permit application was processed as a Regular Significant Modification under 20.2.72 NMAC.

6. EPA notes that the PM 2.5 rates are based on filterable particulate matter. Why were these rates not revised to reflect condensable particulate matter? Also, how does setting TSP=PM₁₀=PM_{2.5} emission rates for limitations in this proposed permit meet existing permit limitations guidance for either NSR or Title V, which is based on PTE? I.e., :
<http://www.epa.gov/region07/air/title5/t5memos/ptememo.pdf>

[NMED-JKimbrell] At the time NMED submitted the draft permit to EPA, EPA had not established testing methods for condensable PM, therefore NMED will not establish emission limits for condensable PM until EPA approves the test methods.

7. The statement of basis and public notice should indicate the change in emissions in the permit being modified/renewal – 40 CFR 70(h)(2).

[NMED-JKimbrell] The basis of your comment is unclear since the Statement of Basis – Summary (DBS) and the public notice does show the increase/decreases per pollutant since the last Title V permit modification/renewal.

8. Comment was made by WEG that the Title V permit failed to require prompt reporting of deviations. NMED responded with reference to conditions that prompt reporting in the Title V is tied to semi-annual reports required in Section A109 of the permit. Semi-annual reports are not “prompt” reporting. The reporting requirement for deviations should be tied to the reporting requirements under 20.2.7 NMAC. However, I could not find a link in the permit with the term “excess” for “deviations”, which would tie reporting to this SIP requirement. Please explain how deviations should be “promptly” reported outside Title V general semi-annual reporting requirements for all monitoring activities.

[NMED-JKimbrell] Excess emissions from any deviation must be reported in accordance with Permit Condition B110.D which states: “The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.”

9. The CAM plan requires quarterly tests for PM determination. Can you make those tests co-related to the specific parameters (pressure drop) or efficiency of the fabric filters or the COMS at the units? This would better indicate parametric monitoring for compliance with the hourly pounds per hour limit. Otherwise, the frequency of quarterly tests do not specifically demonstrate “practical enforceability” with short term limits.

[NMED-JKimbrell] The NSR and Title V Permits require quarterly testing. Page 3 of the CAM Plan states “SJGS must perform quarterly compliance tests for PM₁₀ and PM_{2.5} using EPA Method 5 per conditions 6. b and c of NSR Permit No. 0063-M6R1”.

The quarterly PM test demonstrate that the short term emission limits are met when the control device is operating correctly and maintaining the control efficiency for which it was designed and the short term emission limit was based. The CAM plan ensures the control device is working properly and provides reasonable assurance that short term limits will not be exceeded.

Frequency of monitoring for PM emission limits:

The regulatory requirement in 20.2.70.302.C(2) NMAC requires periodic monitoring, not continuous monitoring, sufficient to yield reliable data that are representative of the source's compliance with the permit.

In addition to CAM plan requirements for the boilers, the draft Title V permit, Condition 402.I, requires quarterly EPA Method testing. Because the EPA Method test is a short term test, it demonstrates compliance with the emission limits for that time period. Due to the base load operation of these boilers, NMED believes that quarterly EPA Method testing along with proper operation and maintenance of the units as demonstrated through other permit requirements, including CAM, provides a reasonable demonstration of compliance with the annual and hourly PM emission limits specified in Section A106.

PM CEMS are not required by any EPA or State regulation applicable to the source. As described above, the permit contains sufficient compliance measures to ensure that the PM emission limits are not exceeded. EPA has determined that, in addition to other compliance measures, COMS are an indicator of good operation and maintenance of control equipment.” *American Electric Power*, at 17.

CAM and opacity trigger points:

The CAM plan required by 40 CFR 64 provides additional monitoring to ensure that the control devices are working properly. When the control devices are working properly, then PNM can indirectly ensure the PM emission limits are not being exceeded. The CAM Plan which is referenced in the draft permit at Condition 402.C is attached to the permit and specifies the corrective actions to be taken if an excursion occurs. For the

CAM Opacity indicator, Table 402.C along with the CAM plan specify the trigger points and if the values are exceeded the facility is required to take corrective action. The CAM plan relies on 3 indicators and these indicators have been reviewed and approved by the Department. The PM CAM Plan was originally approved in the Title V Permit P062R1 and PNM has submitted a revised PM CAM Plan with the application for this renewal Permit P062R2. Two of the three indicators remained the same: Differential pressure drop across the fabric filter on each unit and the by-pass damper position (open/closed) indicator. The Opacity limit established in the Permits and the Consent Decree is 20%. The purpose of the CAM Plan is to have an opacity indicator range set sufficiently low enough to ensure the fabric filters don't fail to the point of violating the permit limit of 20% Opacity or exceed the corresponding PM emission limit. The original CAM Plan set the indicator range at 10% for the Continuous Opacity Monitors (COMs). Since there is no direct comparison between an opacity reading and PM emission rate, NMED determined that the indicator range needed to be lower. Based on several PM stack tests, NMED and PNM agreed to a new indicator range of 6%. In accordance with 40 CFR 64.6(b), PNM will submit COM data 12-months after the issuance of this permit to show that the indicator range of 6% for Opacity has been set sufficiently to satisfy the requirements of 40 CFR 64 and to confirm the appropriateness of the indicator.

10. If this source is a base-load unit, subject to Acid Rain permit, why are "CEMs not required by any EPA or State regulation applicable to the source", per answer to WEG comment on frequency of monitoring PM emission limitations? At the levels of emissions from this source, base-load units require CEMs, per Acid Rain permits.

[NMED-JKimbrell] From the permit application Table 2-N, each of the four units has CEMS for Mercury, SO₂ (inlet and outlet), NO_x, O₂, Opacity and Flow. NMED still stands behind the WEG comments that the use of quarterly periodic emissions test, COMS and the Part 64 compliance assurance monitoring is sufficient to demonstrate compliance with the PM emission limits. SJGS does not have a CO₂ CEMS and Per 40 CFR 75.13(b): "If the owner or operator chooses to use the appendix G method, then the owner or operator shall follow the procedures in appendix G to this part for estimating daily CO₂ mass emissions based on the measured carbon content of the fuel and the amount of fuel combusted."

11. Measure 402.B exempts SS for compliance with COMs, but state maintenance is a good part of compliance equation, which is also a part of CAM for compliance for boilers. No other conditions are referenced for compliance with the conditions for SSM. The source must meet limitations during all periods of operations, including periods of SSM, and these conditions must be addressed in the permit, without exemption from monitoring.

[NMED-JKimbrell] It is unclear which statement you are referring to that exempts Startup and Shutdown in the CAM Plan Monitoring. However, for clarification we have added a sentence to Condition A107.A which states "SJGS shall comply with all other emission limits established for steady state operations even during SSM events."

We have a number of unresolved concerns with this draft permit. Many of our concerns are related to the historical discrepancies in the permitting history of this facility. Other concerns include omission of requirements for SSM in underlying NSR permits, applicable CEMs monitoring, prompt reporting of deviations, and reconsideration on appropriate PTE limitations development for PM10 and PM2.5 emission rates. We request that NMED provide EPA information related to this review, prior to your recommendations to issue this permit. We would be happy to work with you to address our concerns. Please call me at 214- 665-7122.



BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

New Mexico
ENVIRONMENT DEPARTMENT

Air Quality Bureau

1301 Siler Road, Building B
Santa Fe, NM 87507-3113

Phone (505) 476-4300

Fax (505) 476-4375

www.nmenv.state.nm.us



RON CURRY
Secretary

SARAH COTTRELL
Deputy Secretary

August 04, 2010

Mr. Jeremy Nichols
Climate and Energy Program Director
WildEarth Guardians
1536 Wynkoop, Suite 301
Denver, CO 80202

Re: Public Service Company of New Mexico (PNM) San Juan Generating Station – Response to Public Comments on Draft Title V Permit P062R2

Dear Mr. Nichols:

The New Mexico Environment Department (NMED) Air Quality Bureau (AQB) received the comments you provided during the public comment period on the draft operating permit referenced above and on the associated preliminary analyses for Public Service Company of New Mexico's (PNM'S) San Juan Generating Station. Your comments were received via e-mail on May 07, 2010. Through this letter, the Department is responding to your comments as follows.

WildEarth Guardians Comment Summary

The comments submitted by WildEarth Guardians focus on seven areas. Key portions of your comments are presented below for reference, followed by NMED's response.

WEG Comment 1: The Title V Permit Fails to Address Greenhouse Gas Emissions to Assure Compliance with PSD

NMED Response 1:

NMED does not evaluate PSD applicability for an existing, non-modifying facility as part of a Title V permit renewal. Title V was intended to compile all applicable requirements for a source, not create new requirements. See, *East Kentucky Power Cooperative, Inc. Hugh L. Spurlock Generating Station*, Petition No. IV-2008-4, *EPA Order Granting Issue 3 of April 28, 2008 Clean Air Act Title V Petition* (Sept. 9, 2009), at 2. If a source is already subject to PSD, any requirements applied under 20.2.74 NMAC are contained in the PSD permit, and will be incorporated into the Title V permit. If a source is not new or modifying, PSD does not apply, and no additional PSD requirements under that program will be applicable.

On March 29, 2010, EPA issued a Final Notice stating that PSD permitting is not triggered for a pollutant such as GHGs until a final nationwide rule requires actual control of emissions of the pollutant. *Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs*, EPA-HQ-OAR-2009-0597. In that Final Notice, EPA determined that PSD and Title V permitting requirements will not apply to GHGs until at least January 2, 2011. *Id.* at 2. On May 13, 2010, EPA issued a final rule that sets thresholds for greenhouse gas emissions to be included in NSR and PSD permits for new and existing industrial facilities. *PSD and Title V Greenhouse Gas Tailoring Rule*, 40 C.F.R. §§51, 52, 70, and 71; see also <http://www.epa.gov/air/nsr/documents/20100413final.pdf>. Pursuant to the Tailoring Rule, sources subject to the PSD or Title V permitting programs will not be subject to permitting requirements for their GHG emissions under PSD and Title V until January 2, 2011.

To the extent that the comment suggests that PNM unlawfully modified the facility without complying with PSD, the Clean Air Act provides appropriate remedies.

WEG Comment 2: Certain Emission Limits Appear Unsupported by any Ambient Air Quality Impacts Analysis as Required by the SIP

NMED Response 2:

The provision cited is for NSR, not Title V permits.

20.2.72 NMAC, section 208.D states - The Department shall deny any application for a permit or permit revision if considering emissions after controls: D. The construction, modification, or permit revision will cause or contribute to air contaminant levels in excess of any National Ambient Air Quality Standard or New Mexico Ambient Air Quality Standard unless the ambient air impact is offset by meeting the requirements of either 20.2.79 NMAC or 20.2.72.216 NMAC, whichever is applicable;

Permit modifications are submitted under 20.2.72 NMAC, Construction Permits, and emissions are modeled as required by regulation before the construction/ modification to ensure compliance with the NAAQS. All allowable emission limits in the draft Title V permit were imposed by NSR permit 0063M6R1, and air dispersion modeling conducted for that or previous permitting action(s) demonstrated compliance with the NAAQS.

The draft Title V permit does include emission limits for PM_{2.5} in Section A106. The permitted emission limits only include the filterable particulate emissions because PM condensable testing

is waived until an appropriate method is established by EPA. Once EPA specifies a methodology, the permittee shall test PM condensable emissions and submit calculations in the next permitting action as required by NSR Permit 0063M6R1, Condition 1.z and the draft Title V Permit P062R2, Table 106.A, footnote 4, Table 106.C footnote 6.

WEG Comment 3: Startup, Shutdown, and Malfunction Exemptions for Opacity Limits are Contrary to Applicable Requirements

NMED Response 3:

The permit does not contain a “blanket” SSM provision. The SSM provisions in the permit are based on the Consent Decree at Section V, ¶9(a) and other applicable state and federal regulations. The case cited in the comment applies only to an attempt by EPA to include an exemption for HAPs emissions during SSM in a regulation. The comment does not explain how the case should apply to this permit.

Opacity emission limits are established for steady-state operations, but are not established for malfunctions. Startup, Shutdown, and Malfunction (SSM) emissions for the NSPS Units 1, 3, and 4 and the non-NSPS Unit 2 (voluntarily complying) are regulated in accordance 40 CFR 60.8(c) as specified in Condition B106.B.

B106.B: If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

Footnote 8 to Table 106.A was revised to state: “This limit shall apply at all times when air pollutants are being discharged into the atmosphere, unless PNM demonstrates that any excess opacity reading: (a) was caused by a startup, shutdown, malfunction, or emergency, or (b) occurred when both the boiler and all fans that move flue gas in the unit were off. Load changes, poor coal quality, air heater cleaning, soot-blowing, and high ash hoppers shall not be used as a defense for any excess opacity reading. Opacity shall be measured in the duct or, if approved by EPA, after the outlet of the baghouse and corrected to stack exit.”

The Consent Decree reporting requirements for excess emissions are already in the permit at General Conditions B105 Submittal of Reports and B110.D general Reporting Requirements. These two conditions are in compliance with 20.2.7.110 NMAC requirements which are identical to the requirements set forth under CD Section V, ¶9(a)(vi).

WEG Comment 4: The Title V Permit Fails to Require Prompt Reporting of Deviations

NMED Response 4:

The draft permit does not contain Condition 5.1.2.

The permit does require prompt reporting of deviations.

Condition B110(C) states “The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the

probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be contained in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)” The regulation specifies:

20.2.70.302.E.2 NMAC

E. Reporting. The permit shall require reporting sufficient to assure and verify compliance with the terms and conditions of the permit and all applicable requirements, including all of the following.

(1) Submittal of reports of any required monitoring at least every six (6) months. The reports shall be due to the department within forty-five (45) days of the end of the permittee's reporting period. All instances of deviations from permit requirements, including emergencies, must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with Subsection E of 20.2.70.300 NMAC.

(2) Prompt reporting of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. The report shall be contained in the report submitted in accordance with the timeframe given in Paragraph (1) of this section.

As specified in the regulation, NMED requires prompt reporting of all deviations from permit requirements in accordance with the timeframe given in 20.2.70.302.E.1 NMAC, at least every 6 months.

In addition, NMED requires reporting of an exceedance of a quantity, rate, opacity or concentration specified by an air quality regulation or permit condition within a business day of discovery per 20.2.7.110 NMAC. This is also consistent with EPA’s guidance “that ‘prompt’ should be defined as requiring reporting within two to ten days for deviations that may result in emissions increases.” Per Condition B110.D, “The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.” The regulation specifies the following.

20.2.7.110 NMAC

A. The owner or operator of a source having an excess emission shall report the following information to the department on forms provided by the department. The department may authorize the submittal of such reports in electronic format.

(1) Initial report: the owner or operator shall file an initial report, no later than the end of the next regular business day after the time of discovery of an excess emission that includes all available information for each item in Subsection B of 20.2.7.110 NMAC.

(2) Final report: the owner or operator shall file a final report that contains specific and detailed information for each item in Subsection B of 20.2.7.110 NMAC, no later than ten (10) days after the end of the excess emission.

WEG Comment 5: The Draft Title V Permit Fails to Require Sufficient Periodic Monitoring

NMED Response:

EPA has stated that periodic monitoring that meets the requirements of 40 C.F.R. §70.6(a)(3)(i)(B) will be sufficient to satisfy the requirements of 40 C.F.R. §70.6(c)(1) (i.e. will be sufficient to assure compliance with permit terms and conditions) and, in many cases monitoring from applicable requirements will be sufficient to assure compliance with permit terms and conditions. In appropriate circumstances, recordkeeping can serve as monitoring. *In the Matter of: American Electric Power Service Company, John W. Turk Plant, Petition No. VI-2008-01, Order Denying in Part and Granting in Part Petition for Objection to Permit* (Sept. 15, 2009), at 16.

Frequency of monitoring for PM emission limits:

The regulatory requirement in 202.2.70.302.C(2) NMAC requires periodic monitoring, not continuous monitoring, sufficient to yield reliable data that are representative of the source's compliance with the permit.

In addition to CAM plan requirements for the boilers, the draft Title V permit, Condition 402.I, requires quarterly EPA Method testing. Because the EPA Method test is a short term test, it demonstrates compliance with the emission limits for that time period. Due to the base load operation of these boilers, NMED believes that EPA Method testing along with proper operation and maintenance of the units as demonstrated through other permit requirements, including CAM, provides a reasonable demonstration of compliance with the annual and hourly PM emission limits specified in Section A106.

CEMS are not required by any EPA or State regulation applicable to the source. As described above, the permit contains sufficient compliance measures to ensure that the PM emission limits are not exceeded. EPA has determined that, in addition to other compliance measures, COMS are an indicator of good operation and maintenance of control equipment.” *American Electric Power*, at 17.

CAM and opacity trigger points:

The CAM plan required by 40 CFR 64 provides additional monitoring to ensure that the control devices are working properly. When the control devices are working properly, then PNM can indirectly ensure the PM emission limits are not being exceeded. The CAM Plan which is referenced in the draft permit at Condition 402.C is attached to the permit and specifies the corrective actions to be taken if an excursion occurs. For the CAM Opacity indicator, Table 402.C along with the CAM plan specify the trigger points and if the values are exceeded the facility is required to take corrective action. The CAM plan relies on 3 indicators and these indicators have been reviewed and approved by the Department. The PM CAM Plan was originally approved in the Title V Permit P062R1 and PNM has submitted a revised PM CAM Plan with the application for this renewal Permit P062R2. Two of the three indicators remained the same: Differential pressure drop across the fabric filter on each unit and the by-pass damper position (open/closed) indicator. The Opacity limit established in the Permits and the Consent Decree is 20%. The purpose of the CAM Plan is to have an opacity indicator range set sufficiently low enough to ensure the fabric filters don't fail to the point of violating the permit limit of 20% Opacity. The original CAM Plan set the indicator range at 10% for the Continuous Opacity Monitors (COMs). Since there is no direct comparison between an opacity reading and PM emission rate, NMED determined that the indicator range needed to be lower. Based on several PM stack tests, NMED and PNM agreed to a new indicator range of 6%. In accordance

with 40 CFR 64.6(b), PNM will submit COM data 12-months after the issuance of this permit to show that the indicator range of 6% for Opacity has been set sufficiently to satisfy the requirements of 40 CFR 64 and to confirm the appropriateness of the indicator.

The footnote to Table 402.C has been revised to say “¹The permittee shall use the permit modification procedures of 20.2.70.404.B NMAC to change the CAM Plan.” Regulation 20.2.70 NMAC, section 404.A(1)(e) allows an administrative revision for changes that the Department determines to be similar to the stated actions. The Department considers it appropriate to use an administrative amendment to make the CAM triggers more stringent.

Monitoring exemption: Condition B108.D states:

B108.D The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring exemptions at B108.D(2), hours of operation shall be monitored and recorded.

(1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.

(2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.

(3) A minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.

The intent of this exemption is to reduce the possibility that equipment that is not operating must be started up for the sole purpose of monitoring. For a permittee to invoke this exemption, it must be able to produce records of the hours of operation for the specified semi-annual reporting period.

Regardless of the facility’s operating frequency, a minimum of one of each type of monitoring activity must be conducted during the five year period.

NMED has also discussed these monitoring exemptions with EPA, Region 6 and they agreed that this is a reasonable policy for demonstrating compliance.

The draft Title V permit includes emission limits on duct leaks (Units #501, E502, E503, and E504). These emission limits noted in Table 106.D were established in the New Source Review process after the modeling demonstrated compliance with NAAQS. The draft permit, Condition 402.C, requires the facility to implement a duct leak management program to monitor at least quarterly the performance of the Expansion Joint Maintenance Program, which includes an assessment of the actual area of duct leaks present on the units. This program was approved by the Department and included in the Construction Permit modification 0063M4 issued September 8, 2006 and in the Title V Permit P062R1 issued February 02, 2005. In the proposed permit, Condition 402.C has been expanded to required more detail in the development of an Expansion Joint Maintenance Plan.

Furthermore, there are no federal or state requirements to eliminate all duct leaks that were modeled and meet the NAAQS.

WEG Comment 6: Condition B112.E Must be Removed or Revised

NMED Response 6:

Condition B112.E is appropriate for this permit.

Condition B112.E actually states “For sources that have submitted air dispersion modeling that demonstrates compliance with federal ambient air quality standards, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with federal ambient air quality standards specified at 40 CFR 50 NAAQS.”

Sources are required to obtain NSR permits, which require the applicant to conduct air dispersion modeling to demonstrate compliance with applicable ambient air quality standards per 20.2.72.302.B(11) NMAC. NMED reviews and approves air dispersion modeling analyses on a source-by-source basis. The modeled emission rates that demonstrate compliance with ambient standards are incorporated in the NSR permit. The Title V permit then incorporates the NSR requirements, and imposes additional monitoring, recordkeeping, and reporting requirements as necessary to demonstrate compliance. San Juan Generating Station is a Title V source submitting an application for renewal, and therefore the permittee is required to provide a certification of compliance with the relevant terms and conditions of the current operating permit as provided by 20.2.70.300.D(10) NMAC. Section 16 of the application addresses air dispersion modeling requirements to demonstrate compliance with standards.

In addition to certifying compliance at the time of permit application, the permittee is obligated to comply with all applicable requirements, including those requirements that become effective during the term of the permit per Condition B101.A(13) of the permit.


WEG Comment 7: The Title V Permit Fails to Ensure Compliance with Section 112(j) of the Clean Air Act

NMED Response 7:

Pursuant to the CAA, 42 U.S.C. §112 (a) – SJGS is a major source and an existing source. Coal fired EGUs are on the §112(c) list of regulated sources and are subject to §112(g). See, *East Kentucky Power Cooperative, Inc. Hugh L. Spurlock Generating Station*, Petition No. IV-2008-4, *EPA Order Granting Issue 3 of April 28, 2008 Clean Air Act Title V Petition* (Sept. 9, 2009), at 6. The requirements of 112(j) may apply according to the requirements specified therein or as may be specified by EPA in the future. However, the comments do not provide a statutory or regulatory basis for applying any MACT requirements as part of this Title V permit renewal. Nor have they identified any previously applicable MACT obligation that should be reflected in this permit.

Thank you for your interest in the operating permit action for Public Service Company of New Mexico (PNM) San Juan Generating Station.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph W. Kimbrell". The signature is fluid and cursive, with the first name being the most prominent.

Joseph W. Kimbrell
Air Permit Specialist, Advanced
Major Source Unit
Air Quality Bureau

cc: EPA Region 6, Jeffrey Robinson, Cathy Penland

Attachment : Revised Proposed Permit P062R2

FILED

UNITED STATES DISTRICT COURT STATES DISTRICT COURT
DISTRICT OF NEW MEXICO BUQUERQUE, NEW MEXICO

MAY 10 2005

THE GRAND CANYON TRUST and)
SIERRA CLUB,)
)
Plaintiffs,)
)
THE STATE OF NEW MEXICO,)
)
Plaintiff-Intervenor,)
)
v.)
)
PUBLIC SERVICE COMPANY OF)
NEW MEXICO,)
)
Defendant.)

MATTHEW J. DYKMAN
CLERK

CV 02-552 BB/ACT (ACE)

CONSENT DECREE

Date lodged in Court

3/10/05

Date entered by Court

5/10/05

I. BACKGROUND

WHEREAS, on May 16, 2002, Grand Canyon Trust and Sierra Club (“Plaintiffs”) filed a citizen suit against Public Service Company of New Mexico (“PNM”) in the United States District Court for the District of New Mexico in the above cause alleging certain violations of the Clean Air Act (“CAA”) at PNM’s San Juan Generating Station (“San Juan”) near Farmington, New Mexico; and

WHEREAS, Plaintiffs’ complaint alleged that PNM had violated, and was continuing to violate, the twenty (20) percent opacity emission limit at San Juan Units 1, 3 and 4, and that PNM was operating San Juan Units 3 and 4 without a prevention of significant deterioration (“PSD”) permit in violation of the CAA; and

WHEREAS, after discovery, Plaintiffs and PNM filed at least four cross motions for summary judgment on both Plaintiffs’ claims for relief and PNM’s defenses; and

WHEREAS, on May 1, 2003, the Court granted Plaintiffs’ motion for summary judgment on standing; and

WHEREAS, on August 20, 2003, the Court granted PNM’s motion for summary judgment on Plaintiffs’ PSD claim; and

WHEREAS, the Court held a bench trial from November 17-19, 2003, on PNM’s general defenses to Plaintiffs’ opacity claim; and

WHEREAS, on February 2, 2004, the Court dismissed after trial PNM’s general defenses to Plaintiffs’ opacity claim; and

WHEREAS, on April 29, 2004, Plaintiffs served a second notice of intent to sue PNM regarding additional CAA violations at San Juan; and

WHEREAS, on May 26, 2004, PNM agreed to the entry of an Order that found 42,008

opacity limit violations at San Juan that would be addressed in the remedy phase of the case; and

WHEREAS, on September 12, 2003, the State of New Mexico, through the New Mexico Environment Department (“Department”), issued a draft administrative compliance order to PNM alleging that San Juan had violated on numerous occasions the limits for nitrogen oxides, sulfur dioxide, particulate matter, and opacity in its New Source Review and Title V permits; and

WHEREAS, on May 14, 2004, the Department issued a revised draft administrative compliance order to PNM alleging that San Juan had violated on numerous occasions the limits for nitrogen oxides, sulfur dioxide, particulate matter, and opacity in its New Source Review and Title V permits, the deviation reporting requirements in its Title V permit, and its obligation to implement good air pollution control practices; and

WHEREAS, contemporaneously with the lodging of this Consent Decree, the Department has moved to intervene in Plaintiffs’ action as a party-plaintiff and has filed a complaint pursuant to Section 304(a) of the CAA, 42 U.S.C. § 7604(a), alleging the same violations contained in the draft administrative compliance orders issued on September 12, 2003 and May 14, 2004; and

WHEREAS, Plaintiffs, the Department, and PNM have met on numerous occasions in an effort to resolve all of the issues and claims that are the subject of the complaints, draft compliance orders and second notice of intent to sue; and

WHEREAS, Plaintiffs, the Department, and PNM agree that the settlement of these disputes without further litigation and through this Consent Decree is in the public interest, and is a fair, reasonable, and appropriate means of resolving the claims in the complaints, draft compliance orders and second notice of intent to sue because it requires the installation and

operation of pollution control equipment for particulate matter, nitrogen oxides, sulfur dioxide, and mercury at the four (4) San Juan units, at an estimated expenditure of more than \$200 million. This relief is expected to correct all of the CAA violations alleged in the complaints, draft compliance orders and second notice of intent to sue, represents remedial relief sufficient to offset Plaintiffs' and the Department's claims for civil penalties, and reflects PNM's commitment to reduce substantially the emission of nitrogen oxides, sulfur dioxide, particulate matter and mercury from San Juan; and

WHEREAS, PNM is the operator and a co-owner of each unit at San Juan; and

WHEREAS, except as otherwise stipulated to, PNM denies the allegations and does not admit liability for any claims or assertions in the complaints, draft compliance orders and second notice of intent to sue; and

WHEREAS, Plaintiffs, the Department and PNM consent to the entry of this Consent Decree without further trial or appeal;

NOW THEREFORE, it is hereby AGREED, ORDERED AND DECREED as follows:

II. DEFINITIONS

1. Unless otherwise expressly provided herein, the terms used in this Consent Decree that are defined in the CAA, or regulations implementing the CAA, shall have the meanings set forth in the CAA and its implementing regulations.

2. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

“Act” or “CAA” means the Clean Air Act, 42 U.S.C.A. § 7401 et seq.

“Average emission rate” means the total amount of a pollutant emitted from an emission unit during a given time period, expressed in pounds per million Btu (“lb./MMBtu”), derived for

particulate matter in accordance with Method 5, 40 C.F.R. Part 60, and for SO₂ and NO_x in accordance with 40 C.F.R. Part 75. An “hourly average” emission rate means the average emission rate of pollutants discharged from the stack during a sixty (60) minute period, beginning on the hour. A “daily average” emission rate means the numerical average of the hourly average emission rates in an operating day, a “seven day average” emission rate means the numerical average of the hourly average emission rates for the operating days that occur within a period of seven (7) consecutive calendar days, and a “30 day average” emission rate means the numerical average of the hourly average emission rates for the operating days that occur within a period of thirty (30) consecutive calendar days. Unless explicitly specified elsewhere in this Decree, all average emission rates and average emission reduction efficiencies shall include all periods of startup, shutdown, malfunction, and emergency. All averages shall exclude inappropriate data (e.g., malfunction of the monitoring system) as specified elsewhere in this Decree and in the applicable EPA testing regulations at 40 C.F.R. Part 60, Appendix A, and Part 75.

“Block average” means an average emission rate for the operating days occurring over a specified period of consecutive calendar days. A new “block average” is generated for every specified period.

“Business day” means any day of the week except Saturday, Sunday and a federal or New Mexico holiday.

“Calendar day” means any twenty four (24) hour period between 12:00 midnight and the following midnight, Mountain Standard Time.

“CEMS” means continuous emissions monitoring system, which consists of the total equipment used to sample, analyze, and record on a continuous basis emissions-related

parameters other than Opacity.

“COMS” means continuous opacity monitoring system, which consists of the total equipment used to sample, analyze, and record Opacity on a continuous basis.

“Consent Decree” or “Decree” means this Consent Decree.

“Court” means the United States District Court for the District of New Mexico.

“Day” means a calendar day. In computing any period of time under this Decree, except in computing compliance with emission limitations, where the last day would fall on a Saturday, Sunday or federal or New Mexico holiday, the period shall run until the close of the next business day.

“Department” means the New Mexico Environment Department, and any successor departments or agencies.

“Emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of PNM, including acts of God, which situation requires immediate corrective action to restore normal operation of San Juan. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

“EPA” means the United States Environmental Protection Agency, and any successor departments or agencies.

“Excess opacity reading” means each six (6) minute period of time during which the opacity of emissions from a stack at a San Juan unit exceeds twenty (20) percent.

“Malfunction” means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment, or of a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not

malfunctions.

“NSR Permit” means PNM’s NSR Permit 63-M2, issued January 22, 1997.

“NO_x” means total oxides of nitrogen, except nitrous oxide, which are expressed as nitrogen dioxide using EPA Reference Method 7.

“Opacity” means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

“Operating day” means a calendar day in which fuel is combusted in a unit for at least three (3) hours. If fuel is combusted for more than three (3) hours during a calendar day, the calculation of that day’s emissions for the unit shall be based upon the average emission rate of pollution during hours in which fuel was combusted in the unit, and shall not include any time in which fuel was not combusted.

“Operating Permit” means PNM’s Operating Permit P062, which became effective on August 7, 1998.

“Parties” means collectively the Plaintiffs, the Department and PNM.

“Party” means Plaintiffs, the Department or PNM, individually.

“PM” means any airborne, finely divided solid or liquid material, other than uncombined water, with an aerodynamic diameter smaller than 100 micrometers, and which is expressed as PM using EPA Reference Method 5.

“Plaintiffs” means collectively The Grand Canyon Trust and Sierra Club.

“PNM” means Public Service Company of New Mexico, a publicly owned corporation doing business in the State of New Mexico.

“Quarter” means a calendar quarter consisting of three (3) full months, beginning on the first day of either January, April, July, or October.

“Rolling average emission rate” means an average emission rate or average SO₂ percentage reduction that is generated each calendar day based on the average emission rate or average SO₂ percentage reduction for the operating days within a multiple-day period. A new average emission rate or average SO₂ percentage reduction is generated each calendar day.

“San Juan” means the San Juan Generating Station, comprised of four (4) fossil fuel-fired steam generating units (as that term is defined at 40 C.F.R. § 60.41(a)) and associated equipment, located west of Farmington, New Mexico.

“Shutdown” means the cessation of operation of a fossil fuel-fired steam generating unit at San Juan for any purpose or reason.

“SO₂” means sulfur dioxide.

“SO₂ percentage reduction” means the amount of SO₂ reduced by SO₂ removal equipment determined by (1) measuring the concentration of SO₂ in the flue gas upstream of the scrubber inlet (expressed as A), and (2) the contemporaneous concentration of SO₂ measured downstream of the scrubber outlet and any scrubber by-pass return (expressed as B), and performing the following calculation: $100 - 100(B \div A)$. An “hourly average” SO₂ percentage reduction means the numerical average of SO₂ percentage reduction values recorded in a sixty (60) minute period during which pollutants are discharged from the stack, beginning on the hour. A “daily average” SO₂ percentage reduction means the numerical average of the hourly average SO₂ percentage reduction values in an operating day. “Annual average” SO₂ percentage reduction means the numerical average of the hourly average SO₂ percentage reduction values for a period of 365 consecutive calendar days. All averages shall exclude inappropriate data (e.g., malfunction of the monitoring system) as specified elsewhere in this Decree and in the applicable EPA testing regulations at 40 C.F.R Part 60, Appendix A, and Part 75.

“Startup” means the setting in operation of a fossil fuel-fired steam generating unit at San Juan for any purpose or reason.

“State” means the State of New Mexico, including all of its departments, agencies, and instrumentalities.

“Unit 1”, “Unit 2”, “Unit 3”, and “Unit 4” mean each of the four (4) fossil fuel-fired steam generating units and associated equipment at San Juan.

III. JURISDICTION AND VENUE

3. This Court has jurisdiction over the Parties to and the subject matter of this action under Section 304 of the Act, 42 U.S.C. § 7604, the citizen suit provision, and under 28 U.S.C. §§ 1331, 1345, and 1355.

4. Venue is proper in this Judicial District under Sections 304(c) and 113(b) of the Act, 42 U.S.C. §§ 7604(c) and 7413(b), and under 28 U.S.C. §§ 1391 and 1395.

IV. APPLICABILITY

5. This Decree shall apply to and be binding upon Plaintiffs, the Department, and PNM, and their officers, agents, successors, and assigns. PNM shall provide a copy of this Decree to each contractor, subcontractor, laboratory, and any other entity retained to conduct, monitor or otherwise perform any of the work required by or necessary to comply with this Decree.

6. In any action to enforce this Decree, PNM shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Decree, unless PNM establishes that such failure resulted from a *force majeure* event as defined in this Decree.

V. EMISSION CONTROLS AND LIMITATIONS

7. PNM shall at all times, including periods of startup, shutdown, and malfunction, maintain and operate Units 1, 2, 3, and 4 in a manner consistent with good air pollution control practices for minimizing emissions.

8. Prior to installing the pollution control equipment described below, in addition to any other applicable requirement, the emissions of PM, SO₂ and NO_x and opacity from San Juan shall be subject to Section XI (Stipulated Penalties).

9. PNM shall install the following pollution control equipment, and make any other capital and operational modifications necessary to achieve the following emission limitations and mercury operational requirements at San Juan by the deadlines set forth in Section VIII (Emission Limitation Compliance Deadlines):

(a) PM and Opacity

(i) PNM shall operate baghouses and demister technology on San Juan Units 1, 2, 3, and 4 to meet the following emission limitations.

(ii) The PM average emission rate for each of Units 1, 2, 3, and 4 shall not exceed 0.015 lb./MMBtu as measured by EPA Reference Method 5 stack tests conducted at least once each calendar quarter at times and conditions specified by the Department, and according to test protocols approved by the Department, but in all cases under conditions and in a manner no less stringent than described in EPA's 2004 Clean Air Act National Stack Testing Guidance.

PNM shall submit all results and a complete description of the tests to Plaintiffs and the Department in the next quarterly report following PNM's receipt of the results.

(iii) The opacity limit for San Juan Units 1, 2, 3, and 4 shall be twenty (20) percent, averaged over any six (6) minute period except for one six (6) minute average per hour

of up to twenty-seven (27) percent opacity. This limit shall apply at all times when air pollutants are being discharged into the atmosphere, unless PNM demonstrates that any excess opacity reading: (a) was caused by a startup, shutdown, malfunction, or emergency, or (b) occurred when both the boiler and all fans that move flue gas in the unit were off. Opacity shall be measured in the stack or, if approved by EPA, after the outlet of the baghouse and corrected to stack exit.

(iv) Load changes, poor coal quality, air heater cleaning, sootblowing, and high ash hoppers shall not excuse any excess opacity reading.

(v) PNM shall report any exceedance of the opacity limit described above in the next quarterly report following the exceedance.

(vi) If PNM claims that an excess opacity reading was caused by a startup, shutdown, malfunction, or emergency, or occurred when both the boiler and all fans that move flue gas in the unit were off, it shall notify the Department (a) by facsimile no later than twenty-four (24) hours after the start of the next business day, and (b) in writing no later than ten (10) calendar days after the start of the first business day following the reading (or the first reading in the event of a series of excess readings). With respect to the written notification, PNM shall use the applicable excess emission form published by the Department. To the extent PNM claims a defense described in this subparagraph to an excess opacity reading, it shall disclose such claim in its next quarterly report following the excess opacity reading, attach the facsimile and excess emission form filed with the Department, and describe any relevant revisions and amendments to the information in the facsimile and excess emission form filed with the Department, including (1) the date and time of facsimile and written notification to the Department, (2) the cause of the excess opacity reading(s), (3) actions that PNM took to correct the causes of the excess opacity reading(s), (4) all actions that PNM will take to prevent the causes of the excess opacity

reading(s) from recurring. PNM's failure to materially comply with any requirement specified above shall waive any claim that an excess opacity reading was caused by a startup, shutdown, malfunction, or emergency, or occurred when both the boiler and all fans that move flue gas in the unit were off.

(vii) For purposes of this Consent Decree, if Plaintiffs or the Department disagree with any claim of defense described in this subparagraph regarding any excess opacity reading, they shall inform PNM in writing within 180 days of such disagreement. However, any disagreement shall not be subject to Section XII (Dispute Resolution) unless Plaintiffs or the Department expressly state that their disagreement represents a final determination regarding the excess opacity reading, or the Plaintiffs or the Department issue a demand for stipulated penalties regarding the excess opacity reading. Any final determination or demand for stipulated penalties shall be binding upon PNM within thirty (30) days of receipt unless PNM invokes Section XII (Dispute Resolution).

(viii) PNM shall determine compliance with the opacity limit above on a continuous basis using data from the current COMS or an EPA-approved COMS at an alternative location.

(ix) No later than sixty (60) days after the effective date of this Decree, PNM shall submit a report to Plaintiffs and the Department that identifies the technology and operational parameters that represent demonstrated state-of-the-art demister control for each unit, and that determines the extent to which the existing demister technology and operational parameters constitute demonstrated state-of-the-art demister control for each unit. The report shall be reviewed pursuant to Section IX (Approvals). Within ninety (90) days of approval by Plaintiffs and the Department, PNM shall install such technology to the extent it has not already

been installed and is in operation. PNM shall operate and maintain demonstrated state-of-the-art demister technology on San Juan Units 1, 2, 3, and 4, and implement operational parameters to maximize the reduction of acid mist, scrubber carry-over, and any other liquid particulate matter emitted from such units.

(b) NO_x

(i) PNM shall design, install, and operate demonstrated state-of-the-art NO_x combustion control technology on San Juan Units 1, 2, 3, and 4 to minimize the formation of NO_x from each unit. PNM shall contract with one or more expert(s) on the technologies to identify demonstrated state-of-the-art NO_x combustion control equipment and operational requirements for each unit. The expert(s) shall prepare a report describing the recommended control equipment and operational requirements for each unit, including an explanation of the reasons that such equipment and requirements constitute demonstrated state of-the-art NO_x combustion control technology. No later than 180 days after the effective date of this Decree, PNM shall submit the report to Plaintiffs and the Department. The report shall be reviewed pursuant to Section IX (Approvals).

(ii) Upon approval by Plaintiffs and the Department, PNM shall install and operate NO_x combustion control technology to meet the following NO_x emission limits.

(iii) The thirty (30) day rolling average emission rate for NO_x for each of San Juan Units 1, 2, 3, and 4 shall not exceed 0.30 lb./MMBtu. For purposes of calculating the thirty (30) day rolling average, NO_x emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.30 lb./MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler. No later than sixty (60) days after the first twelve (12) months of operation of the new NO_x

combustion control technology installed at each unit, PNM shall submit a report to Plaintiffs and the Department (a) identifying the daily average NO_x emission rate for each unit for every operating day in the period and the thirty (30) day rolling average emission rate for every calendar day of the period, (b) describing the performance of the NO_x control technology at each unit, and (c) evaluating the extent to which the 0.30 lb./MMBtu limit can be lowered at each unit based on the performance of each unit during the first twelve (12) months of operation of the new NO_x combustion control technology. The report shall be reviewed pursuant to the procedure in Section IX (Approvals). Upon approval of Plaintiffs and the Department, the 0.30 lb./MMBtu limit shall be adjusted to a lower limit for the unit if the data gathered during the first twelve (12) months of operation indicate that a given unit is capable of meeting a lower limit, provided, however, that any final NO_x limit for a given unit shall add a ten (10) percent margin of safety to the most representative thirty (30) day average emission rate achieved during the first twelve (12) months of operation.

(iv) PNM shall report any exceedance of the NO_x limits described above in the next quarterly report following the exceedance.

(v) Compliance with NO_x emission limits imposed by this Decree shall be determined on a unit-specific basis using data from NO_x CEMS installed and operated in accordance with 40 C.F.R. Part 75 and any other applicable requirement.

(c) SO₂

(i) PNM shall take those measures necessary to reduce SO₂ emissions at San Juan to achieve and maintain the emission limits below.

(ii) The annual rolling average SO₂ percentage reduction for San Juan Units 1, 2, 3, and 4 shall not be less than ninety (90) percent for each unit.

(iii) The seven (7) day average emission rate of SO₂ at San Juan Units 1, 2, 3, and 4 shall not exceed 0.250 lb./MMBtu for each unit, calculated as a block average as measured by SO₂ CEMS located downstream of the scrubber outlet and any scrubber by-pass return. For purposes of calculating the block average, SO₂ emissions for the first three (3) hours of a cold startup after coal is fed to the boiler shall be capped at 0.250 lb./MMBtu. Cold startup is defined as a startup when the boiler is at ambient indoor temperature measured at the time fuel is first fed to the boiler.

(iv) PNM shall report any exceedance of the limits described above in the next quarterly report following the exceedance.

(v) SO₂ CEMS shall be used to demonstrate compliance with these requirements and shall be installed and operated in accordance with the provisions of this Decree, 40 C.F.R. Part 75 and any other applicable requirement.

(d) Mercury

(i) PNM shall design activated carbon injection technology (or comparable mercury reduction technology) for San Juan Units 3 and 4 for the purpose of maximizing mercury reduction, within the physical and operational constraints of each unit, including the pollution control equipment to be operated at each unit after the deadlines in Section VIII (“physical and operational constraints”). No later than one year after the effective date of this Decree, PNM shall submit a report to Plaintiffs and the Department describing such design and the relevant physical and operational constraints of each unit. The report shall be reviewed pursuant to Section IX (Approvals).

(ii) Within the deadlines established under Section VII (Construction Compliance Deadlines), PNM shall install and operate the mercury control technology, install

mercury CEMs, and establish operating procedures to maximize mercury reduction for Units 3 and 4 during a test period of one and one half (1½) years from the commencement of operation of the mercury reduction technology on the first unit. No later than ninety (90) days after such test period, PNM shall submit a report to Plaintiffs and the Department presenting the results of PNM's efforts to reduce mercury emissions and identifying and discussing the bases for operational parameters to achieve maximum mercury reduction, taking into account the physical and operational constraints of each unit. The report shall be reviewed pursuant to Section IX (Approvals).

(iii) Upon approval by Plaintiffs and the Department, the operational parameters for Units 3 and 4 shall become enforceable under this Decree. PNM shall report compliance with the operational parameters in the quarterly reports required by this Decree.

(iv) PNM shall install and operate similar mercury reduction technology and shall be subject to similar, enforceable operational parameters at Units 1 and 2, to achieve maximum mercury reduction, taking into account the physical and operational constraints of each unit. PNM shall report compliance with the operational parameters in the quarterly reports required by this Decree.

VI. EMISSIONS MONITORING

10. PNM shall maintain, calibrate, and operate COMS to measure the opacity of emissions at San Juan in compliance with the requirements of its Operating Permit and 40 C.F.R. Part 60.

11. To the extent PNM intends to change the current location of the COMS in the stack of a unit to a location after the baghouse and before the SO₂ scrubber, PNM shall request approval from EPA for any such alternative COMS location pursuant to 40 C.F.R. Parts 60 and

75 and any other applicable requirement. PNM shall provide copies of any requests for approval and subsequent related correspondence and documents to Plaintiffs and the Department no later than seven (7) days after their submittal or receipt. Until EPA approves an alternative location, PNM shall use the current COMS to determine compliance with the opacity limit.

12. After the effective date of this Decree, PNM shall maintain, calibrate, and operate CEMS at San Juan Units 1, 2, 3, and 4 to measure accurately and continuously the emissions of SO₂, NO_x, and total exhaust from each unit in full compliance with the requirements of 40 C.F.R. Parts 60 and 75, including requirements for heat input rate measurements. Nothing herein shall preclude PNM from installing, certifying, and operating integrated CEMS equipment to measure SO₂, NO_x, opacity, or any combination thereof.

13. PNM shall ensure that any modification to a COMS or CEMS necessitated by PNM's actions under or in furtherance of this Decree shall be completed prior to the operation of the SO₂, NO_x, and PM controls required by this Decree.

14. PNM shall recertify all COMS and CEMS at San Juan as required by 40 C.F.R. Parts 60 and 75.

15. No later than seven (7) operating days after the first passage of flue gas through the SO₂ controls for each unit, PNM shall calculate for all hours during which pollutants are discharged from the stack in each operating day: (a) the SO₂ hourly average percentage reduction, and (b) the SO₂ hourly average emission rate.

16. No later than thirty (30) days after the first startup following construction of NO_x controls for each unit, PNM shall begin to calculate the hourly average NO_x emission rate.

17. For any hour that valid, quality-assured CEM data for a unit is unavailable, PNM shall calculate the SO₂ and NO_x emissions for the unit in accordance with the missing data

substitution procedures in 40 C.F.R. Part 75.

18. Except for COMS or CEMS breakdowns, repairs, calibration checks, and zero and span adjustments as provided in 40 C.F.R. § 60.13(e), PNM shall be bound by the data from its COMS and NO_x and SO₂ CEMS, and shall not challenge the accuracy or credibility of its COMS and NO_x and SO₂ CEMS in any action under this Decree.

VII. CONSTRUCTION COMPLIANCE DEADLINES

19. PNM shall design, contract, construct, and complete all PM, SO₂, NO_x, and mercury controls required by this Decree according to the following schedule, subject only to *force majeure* under Section XIII:

	<u>Activity</u>	<u>Deadline</u>
(a)	<u>San Juan Unit 4.</u>	
(i)	Commence physical, on-site construction of PM, SO ₂ , NO _x , and mercury controls	10/31/06
(ii)	Complete construction and initiate startup of PM, SO ₂ , NO _x , and mercury controls	10/31/07
(iii)	Provide opportunity for on-site inspection by Plaintiffs and Department	10/31/07 - 12/31/07
(b)	<u>San Juan Unit 3.</u>	
(i)	Commence physical, on-site construction of PM, SO ₂ , NO _x and mercury controls	4/30/07
(ii)	Completion of construction and initiate startup of PM, SO ₂ , NO _x , and mercury controls	4/30/08
(iii)	Provide opportunity for on-site inspection by Plaintiffs and Department	4/30/08 - 6/30/08

- (c) San Juan Unit 1.
- (i) Commence physical, on-site construction of PM, SO₂, and NO_x controls 10/31/07
 - (ii) Complete construction and initiate startup of PM, SO₂, and NO_x controls 10/31/08
 - (iii) Provide opportunity for on-site inspection by Plaintiffs and Department 10/31/08 - 12/31/08
 - (iv) Commence construction of mercury controls 9/30/09
 - (v) Complete construction and initiate mercury controls 12/31/09
- (d) San Juan Unit 2.
- (i) Commence physical, on-site construction of PM, SO₂, and NO_x controls 3/31/08
 - (ii) Complete construction and initiate startup of PM, SO₂, and NO_x controls 3/31/09
 - (iii) Provide opportunity for on-site inspection by Plaintiffs and Department 3/31/09 - 5/31/09
 - (iv) Commence construction of mercury controls 9/30/09
 - (v) Complete construction and initiate mercury controls 12/31/09
 - (vi) Provide opportunity for on-site inspection by Plaintiffs and Department. 12/31/09 - 3/31/10

VIII. EMISSION LIMITATION COMPLIANCE DEADLINES

20. PNM's obligation to comply with the Opacity, PM, SO₂, and NO_x emission limitations, and mercury emission reduction operational requirements described in Section V (Emission Controls and Limitations) shall commence on the dates listed below, subject only to *force majeure* under Section XIII (Force Majeure).

(a) Opacity, PM, NO_x and SO₂ Emission Limits:

(i) For Unit 4, no later than ninety (90) days after completion of construction of PM, NO_x, and SO₂ controls, or by December 31, 2007, whichever date is earlier.

(ii) For Unit 3, no later than ninety (90) days after completion of construction of PM, NO_x, and SO₂ controls, or by June 30, 2008, whichever date is earlier.

(iii) For Unit 1, no later than ninety (90) days after completion of construction of PM, NO_x, and SO₂ controls, or by December 31, 2008, whichever date is earlier.

(iv) For Unit 2, no later than ninety (90) days after completion of construction of PM, NO_x, and SO₂ controls, or by May 31, 2009, whichever date is earlier.

(b) Mercury Reduction Operational Requirements

(i) For Units 3 and 4, no later than sixty (60) days after approval of operational requirements for each unit, or by June 30, 2009, whichever date is earlier.

(ii) For Units 1 and 2, no later than (45) days after completion of construction of mercury controls, or by January 30, 2010, whichever date is earlier.

IX. APPROVALS

21. After receiving any report for approval under this Decree, Plaintiffs and the Department shall have twenty (20) business days from receipt of the report to provide written notice of approval or disapproval, in whole or in part. By notice from Plaintiffs or the Department to PNM, this deadline may be extended by no more than twenty (20) additional business days. If the deadline is so extended then any compliance deadline related to such approval shall be extended for the same number of days. If Plaintiffs and the Department do not provide timely written notice, the report shall be deemed to be approved. If the Plaintiffs and/or the Department disapprove a report, in whole or in part, the disapproving party shall state the

reason(s) and justification(s) for its disapproval. No later than twenty (20) business days after receipt of the written notice of disapproval, PNM shall either (a) accept the disapproving party's position, (b) resolve the issue with the disapproving party and obtain agreement from the remaining party, or (c) initiate the procedure in Section XII (Dispute Resolution). The resolution of a disapproval by one of the three methods shall constitute approval for the purpose of this Decree. Notwithstanding the above procedure, the Parties shall make their best effort to resolve issues regarding the approval of reports through informal consultation and without resort to the procedure in Section XII (Dispute Resolution). Plaintiffs reserve their right to seek from PNM their reasonable costs and fees in evaluating and otherwise addressing PNM's reports under this Section IX (Approvals). PNM reserves its right to oppose any request for costs and fees by Plaintiffs.

X. REPORTING

22. No later than forty-five (45) days after the end of each quarter, beginning with the first quarter of 2005 and continuing until this Decree is terminated under Section XXIV, PNM shall provide a quarterly report to the Plaintiffs and the Department containing the information for the immediately preceding quarter that PNM is required to report on a quarterly basis under this Decree.

23. Each quarterly report shall begin with a cover letter, signed by a representative of PNM, that summarizes the information contained in the report.

24. Each quarterly report shall include, for each San Juan unit:

- (a) a description of construction deadlines achieved, projects completed, progress made toward meeting future deadlines, and any actual, expected or reasonably foreseeable delays;

- (b) identification of all excess opacity readings and any exceedances of the current SO₂ and NO_x emission limits described in Section XI (Stipulated Penalties).
- (c) identification of each failure to meet a standard or emission limitation or operational requirement described in Section V (Emission Controls and Limitations) or a deadline in Section VIII (Emission Limitation Compliance Deadlines);
- (d) the quarterly report described in 40 C.F.R. § 60.7;
- (e) after installation of the PM controls, the required quarterly reports for PM and opacity;
- (f) after installation of the SO₂ controls, PNM shall report on a quarterly basis all seven (7) day block averages that exceeded the applicable emission limitation. PNM shall also report each day for which the annual rolling SO₂ percentage reduction average emission rate at any unit exceeded the applicable reduction requirement during the prior quarter. In addition, PNM shall report on a quarterly basis a list of the hours excluded from the determination of compliance with the applicable emission limitation.
- (g) after installation of the NO_x controls, the required quarterly reports for NO_x emissions;
- (h) after installation of the mercury control equipment, the required quarterly reports for mercury (Hg) emissions; and
- (i) a description of any stipulated penalties due or paid to the Department, or into escrow, including the reason for such payment(s) and the total amount held in escrow at the end of each quarter.

25. If Plaintiffs or the Department request clarification of any quarterly report, including a request for information not provided in such report, PNM promptly shall provide such clarification or information. If the information is requested in electronic form PNM shall provide it to the extent available. PNM shall retain all documents relating to compliance with this Decree, including contracts, plans, and specifications, in accordance with Section XVIII (Record Preservation). Upon request of the Department, PNM shall supply a copy of such documents, subject to a claim of confidential business information under the New Mexico Air Quality Control Act. Upon request of the Plaintiffs, PNM shall provide a copy of such documents as long as Plaintiffs execute a reasonable confidentiality agreement that strictly limits release of the confidential business information to Plaintiffs and their counsel and experts. If Plaintiffs do not agree with PNM's claim of confidential business information Plaintiffs may invoke the dispute resolution procedure in Section XII (Dispute Resolution).

26. PNM's obligation to provide quarterly reports is in addition to any other notification or report required by this Decree or by PNM's operating permit, unless such notification or report is required on a quarterly basis. Nothing in this Decree shall be interpreted to excuse or diminish PNM's obligation to provide any other notice report, or other document to the public or local, state or federal officials.

XI. STIPULATED PENALTIES

27. PNM shall pay stipulated penalties for each failure by PNM to comply with a term or condition of this Decree, unless excused by Section XIII (Force Majeure) or Section XII (Dispute Resolution). All stipulated penalties shall be calculated on a per unit, per day basis, unless expressly stated otherwise. Stipulated penalties shall not be assessed for any reason other than those set forth in this Section.

28. For each failure to comply with a construction commencement deadline:

(a) 1st through 30th day after deadline - \$750

(b) 31st through 60th day after deadline - \$5,000

(c) Beyond 60th day - \$10,000

29. For each failure to comply with a construction completion deadline:

(a) 1st through 30th day after deadline - \$3,000

(b) 31st through 60th day after deadline - \$10,000

(c) Beyond 60th day - \$20,000.

30. PNM shall maintain a record of all stipulated penalties that accrue pursuant to paragraph 28 for each unit. If PNM meets the construction completion deadline for a unit, PNM shall not be obligated to pay any accrued stipulated penalties under this paragraph for that unit. If PNM does not meet the construction completion deadline for a unit, PNM shall pay all accrued penalties for that unit, including interest pursuant to 28 U.S.C. § 1961(a).

31. For each failure to comply with a PM emission limit, \$2,500, with the period of noncompliance commencing with the failure of a PM stack test and ending when a PM stack test demonstrates compliance, except for periods when the unit is not in operation.

32. For each excess opacity reading from San Juan Units 1, 3, and 4, excluding only excess readings caused by a startup or shutdown, or that occurred when both the boiler and all fans that move flue gas in the unit were off, stipulated penalties shall be determined on a quarterly basis for the period of time beginning with the quarter in which this Decree is entered until the first quarter in which flue gas first passes through the baghouse for that unit:

(a) Unit 1:

Stipulated penalties will be due for each excess opacity reading above the following

quarterly threshold amounts: 150 excess opacity readings/quarter for 2005; 125 excess opacity readings/quarter for 2006; 100 excess opacity readings/quarter for 2007; and 75 excess opacity readings/quarter for 2008 and thereafter.

(b) Units 3 and 4:

Stipulated penalties will be due for each excess opacity reading above the following quarterly threshold amounts, by unit: 14 excess opacity readings/quarter for 2005; 12 excess opacity readings/quarter for 2006; 10 excess opacity readings/quarter for 2007; and 8 excess opacity readings/quarter for 2008 and thereafter.

(c) The stipulated penalty for any quarterly excess opacity readings at San Juan Units 1, 3 or 4 shall equal \$1,000 per excess opacity reading above the values specified above, except that the stipulated penalty for the first ten (10) percent of the excess opacity readings above the quarterly thresholds for Unit 1 only shall be \$750. Payment of all stipulated penalties pursuant to this paragraph shall be made, without written demand therefor into a commercially available escrow account, within thirty (30) days of the end of the applicable quarter.

33. For every calendar year, beginning on January 1, 2005 for each unit, if the average number of excess opacity readings per quarter for four (4) quarters is less than the applicable quarterly threshold as set forth above, all stipulated penalties and interest that have accrued in the escrow account during that year shall be refunded to PNM. However, if the average number of excess opacity readings per quarter in that calendar year is greater than the applicable quarterly threshold as set forth above, all stipulated penalties and interest that have accrued in the escrow account during that year shall be paid to the Department. In any calendar year in which there are less than 365 days before flue gas first passes through the baghouse of any unit, the number of excess opacity readings for the balance of the 365 days shall be determined by the following formula: $N = (A \div 90)D$; where:

N = Number of excess opacity readings added to complete the 365 day period;

A = Number of excess opacity readings from the most recent preceding complete quarter for the applicable unit; and

D = Number of days needed to complete 365 day period.

34. For each failure to comply with an opacity standard after the applicable final compliance date until termination of this Decree, the stipulated penalty shall be \$2,000 per excess reading, excluding excess emissions caused by startup, shutdown, malfunction, and emergency.

35. For each failure to comply with a current SO₂ emission limit at San Juan between the effective date of this Decree and the date specified in Paragraph 20(a), stipulated penalties shall be \$1,500 per violation, excluding excess emissions excused by the Department pursuant to Section 20.2.7 NMAC. Such SO₂ emission limits are:

- (a) For all four (4) units combined, 13,000 pounds per hour on a rolling 3-hour average,
- (b) For all four (4) units combined, 0.55 lb./MMBtu on a rolling 30-day average, and
- (c) For all four (4) units combined, 0.46 lb./MMBtu on a rolling hourly annual average.
- (d) For Units 1, 3 and 4, by unit, 1.2 lb./MMBtu on a rolling 3-hour average.
- (e) For Unit 2, seventy-two (72) percent SO₂ reduction on a 30-day rolling average.

36. For each failure to comply with any SO₂ emission limit in Section V (Emission Controls and Limitations) after the date specified in Section VIII (Emission Limitation Compliance Deadlines), \$5,000 per violation.

37. For each failure to comply with a current NO_x emission limit at San Juan between the effective date of this Decree and the date specified in Section VIII (Emission Limitation Compliance Deadlines), excluding only excess readings caused by a startup or shutdown, stipulated penalties shall be determined on a quarterly basis as provided in paragraph 38. The

current NO_x emission limits are:

- (a) For all four (4) units combined, 9,000 pounds per hour on a rolling twenty-four (24) hour period.
- (b) For Units 1, 3 and 4, by unit, 0.45 lb./MMBtu on a rolling three (3) hour average.
- (c) For Unit 2, 0.7 lb./MMBtu on a rolling three (3) hour average.

38. The quarterly excess NO_x emission thresholds, by unit, are as follows:

- (a) Unit 1:

Stipulated penalties will be due for each hour of excess NO_x emissions above the following quarterly threshold amounts: 20 excess NO_x emissions/quarter for 2005; 15 excess NO_x emissions/quarter for 2006 and thereafter.

- (b) Units 2, 3 and 4:

Stipulated penalties will be due for each hour of excess NO_x emissions above the following quarterly threshold amounts: 2 excess NO_x emission/quarter for each unit for 2005 and thereafter.

- (c) The stipulated penalty for any quarterly excess NO_x emission at San Juan shall equal \$5,000 per each hour of excess NO_x emission above the values specified above. Payment of all stipulated penalties pursuant to this paragraph shall be made, without written demand therefor into a commercially available escrow account, within thirty (30) days of the end of the applicable quarter.

39. For every calendar year, beginning on January 1, 2005 for each unit, if the average number of hourly excess NO_x emissions per quarter for four (4) quarters is less than the applicable quarterly threshold as set forth above, all stipulated penalties and interest that have accrued in the escrow account during that year shall be refunded to PNM. However, if the average number of hourly excess NO_x emissions per quarter in that calendar year is greater than the applicable quarterly threshold as set forth above, all stipulated penalties and interest that have accrued in the escrow account during that year shall be paid to the Department. In any calendar year in which there are less than 365 days before the NO_x emission limit deadline in Section VIII

(Emission Limitation Compliance Deadlines) applicable to any unit, the number of excess hourly NO_x emissions for the balance of the 365 days shall be determined by the following formula:

$N = (A \div 90)D$; where:

N = Number of excess hourly NO_x emissions added to complete the 365 day period;

A = Number of excess hourly NO_x emissions from the most recent preceding complete quarter for the applicable unit; and

D = Number of days needed to complete 365 day period.

40. For each failure to comply with the NO_x emission limit after the date specified in Section VIII (Emission Limitation Compliance Deadlines), \$5,000 per violation.

41. For each failure to comply with a mercury reduction operational requirement, \$5,000 per violation.

42. For the failure to comply with any other material requirement in the Decree, \$1,000 per violation.

43. Plaintiffs and the Department will consult regarding demands for stipulated penalties. Plaintiffs or the Department may demand stipulated penalties individually or jointly, and the fact that one party does not make a demand for stipulated penalties shall not be relevant to the merits of any other demand. Plaintiffs and the Department shall provide to the other a copy of any written demand for stipulated penalties at the same time that the demand is served on PNM.

44. No later than thirty (30) days after receipt of a written demand for stipulated penalties, PNM shall pay the stipulated penalties to the Department. Payment shall be by check, made payable to the State of New Mexico, and delivered to:

Office of General Counsel
New Mexico Environment Department
Post Office Box 26110
Santa Fe, New Mexico 87502

The check shall be accompanied by a transmittal letter referencing this Decree and attaching a copy of the written demand. PNM shall send a copy of the check and transmittal letter to the legal representatives for the Plaintiffs.

45. If PNM disputes the written demand for stipulated penalties, no later than thirty (30) days after receipt, PNM shall pay the stipulated penalties into a commercially available interest-bearing escrow account (interest computed consistent with 28 U.S.C. § 1961(a)) and invoke the procedures in Section XII (Dispute Resolution).

46. PNM's liability for stipulated penalties shall not depend on the date that Plaintiffs or the Department send or that PNM receives the written demand. Stipulated penalties shall apply during any period of dispute resolution; provided, however, that PNM may request that the Court reduce or eliminate stipulated penalties that accrue during the dispute resolution period if the Court deems that PNM pursued the dispute in good faith and not for the purpose of delay, without regard to whether PNM prevails in the dispute.

47. Plaintiffs and the Department reserve all rights to pursue any other remedies for violations of this Decree to which they are entitled, including injunctive relief.

XII. DISPUTE RESOLUTION

48. Any dispute identified in this Decree to be resolved by dispute resolution shall be subject to the procedures in this Section. The dispute resolution procedure of this Section XII (Dispute Resolution) shall be the exclusive mechanism to resolve such disputes. All other disputes regarding this Decree shall be resolved only in the context of an action by Plaintiffs or

the Department to enforce this Decree.

49. The dispute resolution procedure shall be invoked upon the giving of written notice by one of the parties to all others advising of a dispute and stating the reasons therefor. The party receiving such notice shall acknowledge receipt of the notice and the Parties shall expeditiously schedule a meeting to begin informal negotiations not later than fourteen (14) days from the receipt of such notice. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting of the parties, unless the parties agree to extend this period.

50. If the parties are unable to resolve the dispute through the informal process described above, the disputing party waives its right to further dispute the issue unless it files a petition with the Court describing the dispute and serves it on the other parties. The other party or parties to the dispute shall have thirty (30) days after receipt of the petition to file and serve a written response. In judicial proceedings under this Section, the petitioning party shall carry the burdens of proof and persuasion. This Court shall have exclusive jurisdiction over any disputes under this Section XII (Dispute Resolution).

51. The invocation of the dispute resolution procedure under this Section shall not extend, postpone, or affect any obligation of any Party under this Decree not directly in dispute, unless the Parties or the Court agree otherwise. Stipulated penalties with respect to the disputed matter shall continue to accrue, but payment shall be stayed pending resolution of the dispute.

52. Plaintiffs reserve the right to seek from PNM their reasonable costs, including attorney and expert witness fees, expended in any dispute resolution process. PNM reserves its right to object to any such request by Plaintiffs.

XIII. FORCE MAJEURE

53. For the purpose of this Decree, “*force majeure*” is defined as any event arising from causes beyond the control of PNM or any entity controlled by PNM, or its agents, contractors, or employees, that delays, prevents, or can reasonably be anticipated to delay or prevent compliance with this Decree and that could not be overcome with due diligence.

54. PNM’s unanticipated or increased costs or changed financial circumstances shall not constitute *force majeure*. The absence of an approval under this Decree, or the Department’s failure to issue a permit if one is legally required before implementing the obligation at issue, or the stay of a permit if issued, shall not constitute *force majeure*, unless PNM demonstrates that (a) it submitted a timely and complete application or other request for approval, (b) it complied with all requirements for such application or other request for approval, and (c) it diligently and timely responded to all requests for additional information.

55. If any event occurs which causes or may cause a delay by PNM in meeting any deadline of this Decree, whether or not attributable to *force majeure*, PNM shall give written notice to Plaintiffs and the Department no later than ten (10) business days after the date on which PNM first knew or reasonably should have known that the event might cause a delay. PNM shall be deemed to have notice of any event that a contractor or subcontractor retained to implement this Decree had or reasonably should have had, unless through the affirmative misrepresentation of such contractor or subcontractor PNM was not provided such notice. No later than fifteen (15) days after service of the written notice, PNM shall submit a written report to Plaintiffs and the Department providing (a) the reasons for the delay, (b) the anticipated length of the delay, (c) a description of the obligation that has been or would be delayed, (d) a description of all actions taken and to be taken to prevent or minimize the delay, (e) a timetable for those

actions, (f) a schedule for complying with any deadline in this Decree which has been or would be affected by the event, and (g) the rationale and supporting documentation for a claim, if any, that the delay was or would be attributable to *force majeure*.

56. If Plaintiffs and the Department agree that the delay has been or would be caused by *force majeure*, the Parties may stipulate to an extension of the deadline for the length of time necessary to accommodate the *force majeure*. In establishing a new deadline, Plaintiffs and the Department shall take into consideration PNM's evidence regarding weather, outage schedules, and remobilization requirements. If the Parties cannot agree to the length of the extension, PNM may invoke the procedure in Section XII (Dispute Resolution).

57. If Plaintiffs and/or the Department do not agree that the delay or anticipated delay has been or would be caused by *force majeure*, no later than twenty (20) days after receiving PNM's written report, Plaintiffs and/or the Department shall notify PNM in writing of this decision. The decision shall be final and binding on PNM unless PNM invokes the procedure in Section XII (Dispute Resolution).

58. PNM shall have the burden of proving that any delay or anticipated delay has been or would be caused by *force majeure* (including proving that PNM gave timely notice), and of proving the duration and extent of any delay(s).

59. PNM's material failure to comply with the notification and reporting requirements of this Section XIII (Force Majeure) shall constitute a waiver of any claim of *force majeure* for the delay or anticipated delay at issue.

60. The extension of one deadline based on a specific event shall not constitute an extension of any other deadline unless agreed by the Parties or directed by this Court.

61. If PNM fails to comply with a deadline in this Decree due to *force majeure*, PNM shall be excused only from complying with that deadline and from paying stipulated penalties for failing to comply with that deadline, and only for that period of time excused by *force majeure*.

XIV. MODIFICATION

62. Any material modification of this Decree shall be in writing, signed by the Parties, and approved by this Court. Non-material modifications of this Decree shall be made upon written agreement of the Parties and shall be filed with the Court.

XV. NOTICE TO PARTIES

63. Whenever this Decree requires a Party to provide notice or submit a document to another Party, the notice or document shall be sent to the following persons in electronic (.pdf) format unless the size or other characteristic of the notice or document require the submission of a hard copy.

For Plaintiffs

Steven Sugarman, Esq.
Belin & Sugarman
618 Paseo de Peralta
Santa Fe, NM 87501
Phone: 505-983-1700
Fax: 505-983-0036
sugarman@bs-law.com

Reed Zars, Esq.
Attorney at Law
910 Kearney St.
Laramie, WY 82070
Phone: 307-745-7979
Fax: 307-745-7999
rzars@lariat.org

George Hays, Esq.
Attorney at Law
236 West Portal Avenue, #110
San Francisco, CA 94127
Phone: 415-566-5414
Fax: 415-731-1609
georgehays@mindspring.com

For the Department

Sandra Ely, Chief
Air Quality Bureau
New Mexico Environment Department
2048 Galisteo Street
Santa Fe, NM 87505
Phone: 505-827-1494
Fax: 505-827-1523
sandra_ely@nmenv.state.nm.us

Eric Ames, Esq.
Office of General Counsel
New Mexico Environment Department
1190 St. Francis Dr.
P.O. Box 26110
Santa Fe, NM 87502-6110
Phone: 505-827-2982
Fax: 505-827-1628
eric_ames@nmenv.state.nm.us

For PNM

Rick Alvidrez, Esq.
Keleher & McLeod, P.A.
P.O. Drawer AA
Albuquerque, NM 87103
Phone: 505-346-9150
Fax: 505-346-1370
rla@keleher-law.com

Randy E. Brogdon, Esq.
Troutman Sanders LLP
Bank of America Plaza, Suite 5200
600 Peachtree St. NE
Atlanta, GA 30308-2216
Phone: (404) 885-3147
Fax: (404) 962-6892
Randy.Brogdon@troutmansanders.com

Hugh Smith
Senior Vice President, Energy Resources
Public Service Company of New Mexico
2401 Aztec Rd, NE
Albuquerque, NM 87107
Phone: (505) 855-6296
Fax: (505) 855-6327
HSmith1@pnm.com

64. A Party may change the name, title, address, telephone number, fax number, or email address of a contact person identified above by providing written notice to the other Parties. Such change shall not constitute a modification for the purpose of Section XIV (Modification).

XVI. ENTRY AND INSPECTION

65. Nothing in this Decree shall be construed to limit or impair the Department's authority under the applicable laws and regulations to enter and inspect San Juan.

XVII. AVAILABILITY OF INFORMATION

66. Nothing in this Decree shall be construed to limit or impair the Department's authority under the applicable laws and regulations to require PNM to provide information regarding San Juan.

XVIII. RECORD PRESERVATION

67. For at least ten (10) years after termination of this Decree, PNM shall maintain all records, documents, data, and other information related to this Decree. Nothing in this Decree shall be construed as a waiver of any attorney client, attorney work product, or other privilege that PNM might otherwise possess.

XIX. COMPLIANCE WITH APPLICABLE LAWS

68. PNM shall undertake the obligations required by this Decree in accordance with applicable federal, state, and local laws and regulations.

69. This Decree is not a permit. The emission limits and related requirements contained in this Decree, however, shall be incorporated into permits consistent with Section XXIII (Integration with Permits). This Decree does not relieve PNM of its responsibility to comply with all federal, state, and local laws and regulations and orders of this Court.

70. Notwithstanding the foregoing, if any current or future federal, state, or local law or regulation conflicts with, or have the effect of relaxing, any requirement in this Decree, the more stringent requirement shall apply.

XX. EFFECT OF SETTLEMENT

71. This Decree constitutes a complete and final release of all civil claims for violations alleged in the complaints, draft compliance orders, and second notice of intent to sue through the effective date of this Decree.

72. Nothing in this Decree shall be construed to create any rights in or grant any cause of action to any person not a Party to this Decree. The preceding sentence shall not be construed to waive or nullify any rights that a person not a signatory to this Decree may have under applicable law. Plaintiffs and the Department expressly reserve all rights, defenses, claims, demands, and causes of action that they might have against PNM with respect to any matter, transaction, or occurrence relating to San Juan that is not addressed in this Decree. PNM expressly reserves all rights and defenses which it may have to any claim, demand, or cause of action relating to San Juan that is not addressed in this Decree. The Parties expressly reserve all rights, defenses, claims, demands, and causes of action which each Party may have against any person not a Party to this Decree with respect to any matter, transaction, or occurrence relating to San Juan. Nothing in this Decree shall be construed as a waiver of any privilege by a Party.

73. As long as PNM remains in compliance with the requirements in this Decree, Plaintiffs and the Department covenant not to sue PNM, its officers, employees, agents, successors, or assigns for matters alleged in the complaints, draft compliance orders, and second notice of intent to sue. Nothing herein shall prevent Plaintiffs or the Department from seeking any legal or equitable remedy to enforce the requirements of this Decree. This covenant not to sue does not pertain to any matters not alleged in the complaints, draft compliance orders, or second notice of intent to sue. Plaintiffs and the Department expressly reserve all rights, defenses, claims, demands, and causes of action which they may have against PNM with respect

to any matter, transaction, or occurrence that was not alleged in the complaints, draft compliance orders, or second notice of intent to sue. PNM represents and warrants that it has not notified Plaintiffs or the Department of any claims or alleged violations that are not included in the matters alleged in the complaint, draft compliance orders, or second notice of intent to sue at San Juan, and Plaintiffs and the Department represent and warrant that they are not presently aware of any claims or alleged violations at San Juan that are not included in the matters alleged in the complaint, draft compliance orders, or second notice of intent to sue.

74. Nothing herein shall prevent the Department from taking appropriate action to address conditions at San Juan that constitute an emergency situation or that present an immediate threat to public health or the environment.

75. This covenant not to sue shall survive the termination of this Decree as an agreement between PNM, Plaintiffs and the Department. This Decree shall not be used to establish the liability of PNM in any action, except to enforce the provisions of this Decree.

76. Plaintiffs Grand Canyon Trust and Sierra Club, and the Department, but not the Attorney General acting to represent the interests of residential and small business customers, agree not to contest, appeal or otherwise challenge a request by any owner of San Juan to recover the costs to install and operate the pollution control equipment described in this Decree before the New Mexico Public Regulation Commission (“NMPRC”) or any other rate-making regulatory agency. PNM’s obligations in this Decree shall not be affected by whether any costs associated with the pollution control equipment are deemed recoverable by the NMPRC or any other rate-making regulatory agency.

XXI. RETENTION OF JURISDICTION

77. The Court shall retain jurisdiction of this matter for the purpose of implementing

and enforcing the terms and conditions of the Decree and adjudicating disputes under Section XII (Dispute Resolution) until termination of the Decree.

XXII. ENFORCEMENT

78. This Decree is an enforceable document. If PNM violates any requirement of this Decree, Plaintiffs and/or the Department may request any legal or equitable remedy from this Court to achieve full compliance with such requirement. PNM reserves all rights and defenses to an enforcement action by Plaintiffs or the Department not expressly precluded by this Decree, and nothing in this Decree shall constitute a waiver of such rights or defenses.

XXIII. INTEGRATION WITH PERMITS

79. All requirements set forth in Section V (Emission Controls and Limitations) and Section VI (Emissions Monitoring), including all applicable definitions in Section II (Definitions), shall be incorporated as applicable requirements into San Juan's Operating Permit. For incorporation of these applicable requirements into PNM's operating permit, the requirements of this Decree shall be modified such that the role of Plaintiffs and the Department is assumed by the Department.

80. No later than one hundred and eighty (180) days after the effective date of this Decree, PNM shall submit an application to revise its NSR permit to authorize the construction of pollution control equipment required by Section V (Emission Controls and Limitations) of this Decree, if legally required. PNM shall consult with the Department to ensure that the permit application is administratively and technically complete. Plaintiffs may only challenge a provision in such permit to the extent it is not consistent with, or is not addressed by, this Decree.

81. PNM shall incorporate all applicable requirements in the Sections described

above at such time as it is required to renew its Operating Permit for San Juan; provided, however, that PNM may seek to modify its Operating Permit after the first renewal to incorporate any NO_x limit or mercury operational requirements to the extent they became applicable after such renewal. The Department shall include in the revised operating permit those emission limits and other requirements in the current operating and NSR permits; provided, however, the Department shall not relax any limit or requirement of this Decree. PNM shall consult with the Department to ensure that the permit application is administratively and technically complete. Plaintiffs may only challenge a provision in such permit to the extent it is not consistent with, or is not addressed by, this Decree.

82. PNM shall provide a copy of each permit application to Plaintiffs at the same time it is filed with the Department.

83. After termination of this Decree, PNM shall not, in any subsequent application for a modified or renewed Title V permit, seek to revise any applicable requirement in the Sections described above that is to be incorporated into a Title V permit to the extent any such revision would render such requirement less stringent. This agreement shall survive as an enforceable obligation between PNM, and Plaintiffs and the Department.

XXIV. TERMINATION OF CONSENT DECREE

84. This Decree shall remain an enforceable order of the Court until Plaintiffs and the Department agree, or the Court determines in response to a petition by a Party, that (a) all requirements of the Decree have been satisfied, (b) PNM has installed all controls and has been in material compliance with all emission limitations for twelve (12) consecutive months (except for the mercury operational requirements for Units 1 and 2 for which six (6) months compliance will be sufficient), (c) all applicable requirements of the Decree have been incorporated into the

Operating Permit for San Juan, and (d) PNM has paid any stipulated penalties due under the Decree. Termination of this Decree shall not affect any matter expressly set forth in this Decree that is to survive as an agreement among or between Plaintiffs, the Department, and PNM.

XXV. COSTS

85. PNM agrees that, pursuant to Section 304 of the Act, 42 U.S.C. § 7604(d), Plaintiffs are entitled to recover their reasonable costs of litigation in this action, including attorney and expert witness fees. The issue of the amount of such costs is reserved. If PNM and Plaintiffs are unable to reach an agreement regarding the amount of such costs, Plaintiffs may petition the Court for a determination of such amount. Furthermore, Plaintiffs expressly reserve their right to petition the Court for recovery of additional costs and fees incurred after they sign this Decree, and PNM reserves its right to oppose any such petition.

XXVI. SEVERABILITY

86. If any provision or authority of this Decree is held by a court of competent jurisdiction to be invalid, if that provision or authority is severable from the remainder of the Decree, the remainder of the Decree shall remain in force and shall not be affected by the court's order and ruling. If the application of this Decree to any Party or circumstance is held by a court of competent jurisdiction to be invalid, the application of this Decree to other Parties or circumstances shall remain in force and shall not be affected thereby.

XXVII. HEADINGS

87. Any section or paragraph heading in this Decree is provided solely as a matter of convenience to the reader and shall not be construed to alter the meaning of any provision of this Decree.

XXVIII. NOTICE OF DECREE

88. The Parties agree to cooperate in good faith in order to obtain the Court's review and entry of this Decree.

89. Pursuant to 42 U.S.C. § 7604(c)(3), this Decree shall be lodged with the Court and simultaneously presented to the United States for review and comment for a period not to exceed forty five (45) days. After the review period, the Decree may be entered by the Court. If the Decree is not entered by the Court, the Parties shall retain all rights they had in this litigation or under state law before the lodging of the Decree.

90. The Parties agree to cooperate in good faith to obtain prompt review of this Decree by the United States and the Court. If the United States or the Court comment on the Decree, and as a consequence the Decree is not entered, the Parties agree to discuss such comments and attempt to make such revisions as necessary to obtain entry of the Decree.

XXIX. EFFECTIVE DATE

91. This effective date of this Decree shall be the date on which the Court approves and enters this Decree.

XXX. SIGNATORIES AND ASSIGNMENT

92. Each undersigned representative of a Party to this Decree certifies that he or she is fully authorized to enter into the terms and conditions of this Decree and to execute and legally bind such Party to this document.

93. The Parties agree not to oppose entry of this Decree by this Court or challenge any provision of this Decree.

94. If PNM proposes to sell or transfer all or part of its ownership interest in any of San Juan, prior to such sale or transfer PNM shall advise the purchaser or transferee in writing of

the purchaser's or transferee's obligation to comply with the terms of this Decree, and PNM shall send a copy of such written notification to the Plaintiffs and the Department at least thirty (30) days before such proposed sale or transfer.

95. The sale or transfer of all or part of PNM's ownership interest in San Juan, or any modification of its status as operator of San Juan, shall not relieve PNM of its obligations to perform under this Decree unless agreed upon by the Parties.

96. If the Plaintiffs and the Department agree, the Parties and any purchaser or transferee that has become a party defendant to this Decree may execute a modification that relieves PNM of its liability under this Decree with respect to the ownership interest to be sold or transferred, and makes the purchaser or transferee liable for all obligations and liabilities applicable to the purchased or transferred ownership interest.

XXXI. COUNTERPARTS

97. This Decree may be signed in counterparts.

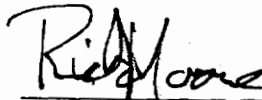
The undersigned Parties enter into this Decree and submit it to this Court for approval and entry.

BRUCE D. BLACK

UNITED STATES DISTRICT JUDGE

Dated this 10th day of May, 2005.

GRAND CANYON TRUST

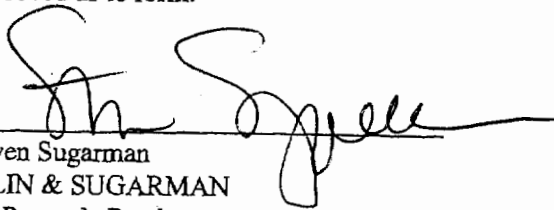


Rick Moore
Associate Director

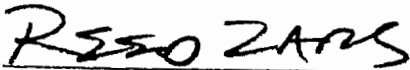
Date:

3/9/05

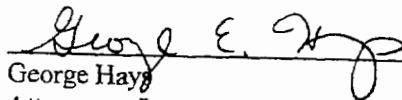
Approved as to form:



Steven Sugarman
BELIN & SUGARMAN
618 Paseo de Peralta
Santa Fe, NM 87501
505-983-1700



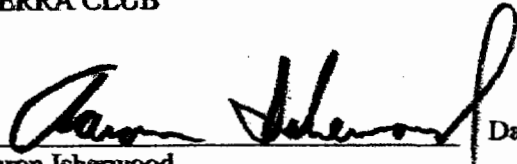
Reed Zars
Attorney at Law
910 Kearney St.
Laramie, WY 82070
307-745-7979



George Hays
Attorney at Law
236 West Portal Avenue, #110
San Francisco, CA 94127
415-566-5414

*Attorneys for Plaintiffs Grand Canyon Trust
and Sierra Club*

SIERRA CLUB

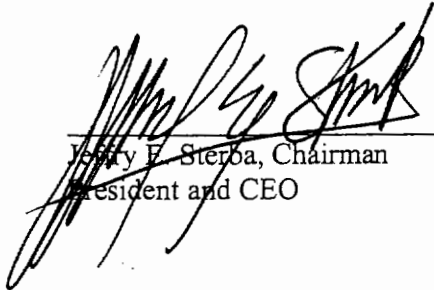


Aaron Isherwood

Date: March 9, 2005

Sierra Club Environmental Law Program

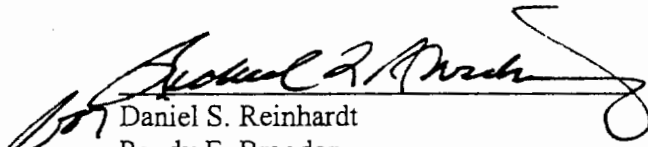
PUBLIC SERVICE COMPANY OF NEW MEXICO



Jerry F. Sterba, Chairman
President and CEO

Date: 3-9-05

Approved as to form:



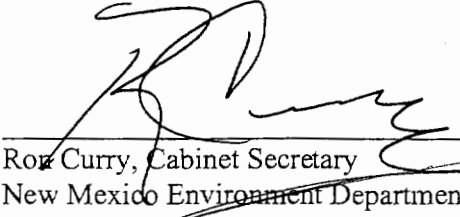
Daniel S. Reinhardt
Randy E. Brogdon
TROUTMAN SANDERS, LLP
Bank of America Plaza Suite 5200
600 Peachtree Street, N.E.
Atlanta, GA 30308-2216
(404) 885-3000
FAX - (404) 885-3995

Richard L. Alvidrez
KELEHER & McLEOD, P.A.
P.O. Box AA
Albuquerque, New Mexico 87103
(505) 346-4646
FAX (505) 346-1370

Henry V. Nickel
HUNTON & WILLIAMS
1900 K Street, N.W.
Washington, D.C. 20006
(202) 955-1500

*Attorneys for Defendant Public Service
Company of New Mexico*

NEW MEXICO ENVIRONMENT DEPARTMENT


Date: _____
Ron Curry, Cabinet Secretary
New Mexico Environment Department

3/9/05

Approved as to form:



Eric Ames, Esq.
Assistant General Counsel
Special Assistant Attorney General
New Mexico Environment Department
.1190 St. Francis Drive
Santa Fe, New Mexico 87502-6110
(505) 827-2982