

Statement of Basis - Narrative

Title V Permit

Type of Permit Action: PSD-Minor Modification

Facility: Afton Generating Station

Company: Public Service Company of New Mexico (PNM)

Permit No(s): PSD2466-M4 and P211-R2

Tempo/IDEA ID No.: 164 - PRT20140002

Permit Writer: Linsey Hurst

| | | |
|--------------------------|--|---|
| Permit Review | Date to Enforcement: 3/4/2016 | Date of Enforcement Reply: 3/16/2016 |
| | Date to Applicant: 3/4/2016 | Date of Applicant Reply: 3/29/2016 |
| | Date to EPA: TBD | Date of EPA Reply: TBD |
| | Date to Supervisor: 3/4/2016, Additional comments due 4/13/2016 | |

1.0 Plant Process Description:

The Afton Generating Station (AGS) is an electric generating facility consisting of one GE Frame 7FA combustion turbine with combined cycle heat recovery stream generator (HRSG) capability: The combined cycle heat recovery system includes provisions for duct burning. The nominal generating capacity of the combustion turbine at 60 F ambient temperature is 152 MW and 164 MW at 0 F ambient temperature. The HRSG system provides an additional nominal capacity of 68 MW bringing the turbine/HRSG capacity to 220 MW (nominal) and 232 MW maximum. The duct burner adds another 60 MW of generating capacity, bringing the station total to 280 MW (nominal) and 292 MW maximum. The primary combustion turbine fuel is natural gas. The facility is permitted to operate 8,760 hours per year with natural gas fuel. Fuel oil may be used during emergency conditions and for testing the emergency system. The maximum annual operation with oil firing is limited to 200 hours. The Afton Generating Station is owned and operated by Public Service Company of New Mexico. The Station is located approximately 15 miles southwest of Las Cruces, New Mexico.

AGS is a single unit, natural gas fired combustion turbine used to generate commercial electrical power. The facility may operate in either a simple cycle or combined cycle mode. During combined cycle operation the facility may also operate a duct burner for additional generation capacity. In addition to natural gas firing, AGS is also permitted to use a limited amount (200 hours per year of operation) of fuel oil during emergency conditions and for testing. Afton has four different operating scenarios. Scenario 1 is natural gas fired simple cycle (SC) operation; Scenario 2 is combined cycle (CC) operation without the duct burner in operation; Scenario 3 is CC operation with the duct burner; Scenario 4 is SC operation with fuel oil as the fuel source. The current permits (NSR and Title V) have separate emission limits identified for each of these scenarios. There are several other operational considerations important to understanding AGS permitting:

1. Turbine emissions exhaust through a different stack depending on whether it is operating in SC or CC mode. These stacks have been designated as 1A for SC and 1B for CC.
2. Cooling tower operation is needed only when the HRSG (heat recovery steam generator) is operating (i.e. the facility is in CC mode). Therefore cooling tower emissions add to total facility emissions during CC operation but not SC operation.

3. The duct burner operates only during CC mode. Duct burner operation is limited to a maximum of 1,920 hours per year.
4. There is an SCR unit for reduction of NO_x emissions, but the SCR unit can operate only during CC mode because exhaust temperature is too high for the SCR during SC mode.
5. AGS would operate only in SC mode in the event of fuel oil firing.

The facility is subject to Title IV – Acid Rain (40 CFR 72) and Acid Rain Continuous Emissions Monitoring (CEMS) required under 40 CFR 75. In addition, it is subject to NSPS Da and GG.

The facility consists of the following regulated emissions sources: one (1) combustion turbine, GE F7A (Unit 1); one (1) 2-cell forced draft cooling tower (Unit 2); one (1) heat recovery steam generation (HRSG) system with ammonia-injection SCR (Unit 3); one (1) 5.1 MMBtu/hr dew point heater (Unit 4); and one (1) duct burner (Unit 7).

Insignificant/Exempt equipment includes one (1) 1,000,000 gal water tank (Unit T-1); one (1) 20,000 gal aqueous ammonia tank (Unit T-2); one (1) 7,000 gal sulfuric acid tank (Unit T-3); and one (1) 7,000 gal bleach tank (Unit T-4).

Turbine emissions are routed through Stack 1A during simple cycle operation (Scenarios 1,4), but through Stack 1B during combined cycle – with or without the duct burner (Scenarios 2,3). All combined cycle operations receive SCR for reduction of NO_x emissions. Note that both simple cycle modes – natural gas combustion and fuel oil combustion – exit stack 1A uncontrolled.

The cooling towers are of low drift design and incorporate drift eliminators. These are wet/dry hybrid towers – indicating that a dry air heat exchanger is used on the front end to reject some of the heat from low pressure steam, before the steam reaches the wet towers. This design allows the cooling water recirculation rate to be much lower (18,871 gpm) than in a wet-only design as was the original idea and permitted in 2466M2 (previously permitted recirc rate = 69,500 gpm). The wet/dry hybrid design, with lower recirc rate, allows for a much higher total dissolved solids (TDS) content to build, without adding to the drift emissions. This is why the TDS can be increased from 3,000 to 4,500 mg/l, while actually lowering the PM drift emissions.

SSM emissions have been reported for this facility. While operating in combined cycle mode (Scenarios 2, 3), the turbine exhaust must heat the catalyst for 3-6 hours after startup before the ammonia injection SCR is functional. Therefore, NO_x and CO SSM emissions are permitted for operating Scenarios 1, 2, and 3. A modeling waiver was also issued for the SSM emissions (e-mail from Eric Peters to Ralph Williams, dated 3/11/09).

2.0 **Description of this Modification:**

This TV Permit Renewal incorporates the following changes as permitted under New Source Review (NSR)/ Prevention of Significant Deterioration (PSD) PSD2466-M4:

1. Revise the numeric value of the AGS SSM limits for NO_x emissions in permit 2466-M3 during (natural gas fired) simple cycle operation only.
2. Change applicability for Unit 8, emergency Fire Pump. The engine is now subject to 40 CFR 63 Subpart ZZZZ and is no longer eligible for insignificant status for Title V under 20.2.70 NMAC.
3. Revise language for Condition A405.A, Cooling Tower, Unit 2, TDS Concentration. The new language clarifies the TDS limit is for a daily average since the unit is continuously monitored instead of periodically monitored.
4. Add Greenhouse gas emissions to Table 102.A of the permit.

3.0 **Source Determination:**

1. The emission sources evaluated include the Afton Generating Station.
2. Single Source Analysis:
 - A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes
 - B. Common Ownership or Control: Are the facilities under common ownership or control? Yes
 - C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes
3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes? Yes

4.0 **PSD Applicability:**

Title V action does not determine PSD applicability; see the History Table for a summary of previous PSD applicability determinations. This facility has a PSD permit with BACT limits.

From NSR PSD2466-M4: *This facility is considered PSD major since when operating in Scenarios 2 or 3, it becomes one of the 28 listed facilities according to 20.2.74.501 NMAC. As a result, emissions resulting from combined cycle operation (simple cycle with or without the duct burner but with the HRSG system) required BACT to control NOx emissions. This SCR system consists of ammonia injection. The relatively high ammonia HAP emissions are a result of “ammonia slip”, or unreacted ammonia that passes through the stack to atmosphere.*

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

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|--------------------|------------|--|---|
| P211R2* & P211AR3* | TBD | TV Renewal Acid Rain Renewal | Renewal and incorporation of changes since P211R1 and NSR 2466M3 and M4. |
| 2466M4* | 11/10/2014 | NSR - Sig. Rev.; PSD Minor Mod Kimbrell, Joseph | This is a PSD Minor Action. The facility is a PSD Major source with BACT on turbine C-01. Increase hourly NOx SSM rates for only Simple Cycle scenario following additional testing and analysis. No modifications were part of this action. Modeling Waiver was approved. Revise language for Condition A405.A, Cooling Tower, Unit 2, TDS Concentration. The new language clarifies the TDS limit is for a daily average since the unit is continuously monitored instead of periodically monitored. Add Greenhouse gas emissions to Table 102.A of the permit. Permit 2466: Combined cycle NO ₂ emissions of 3.5 PPM shall be achieved using the Department's BACT |

| Permit Number | Issue Date | Action Type | Description of Action (Changes) |
|------------------|------------|---------------------------------------|--|
| | | | determination that SCR at this emission rate constitutes BACT. |
| 2466M3 | 12/16/2010 | NSR - Sig. Rev. Kimbrell, Joseph | Increase hourly CO SSM rates for all three scenarios following additional testing and analysis. No modifications were part of this action. Modeling Waiver was approved. Permit 2466: Combined cycle CO emissions of 9.0 PPM shall be achieved by using the BACT determination of good combustion practices and the use of natural gas as fuel. No BACT for simple cycle or SSM. |
| P211R1 & P211AR2 | 08/06/2010 | TV Renewal Acid Rain Renewal | Renewal and incorporation of changes since P211M1 and NSR 2466M2R1. |
| 2466M2R1 | 08/27/2009 | NSR – Tech Rev. Smith, Coleman | Increase hourly NOx SSM rates for Scenarios 2 and 3 to account for short averaging time (actual duration of SSM event). |
| 2466M2 | 03/17/2009 | NSR - Sig. Rev. Smith, Coleman | Cooling tower: wet/dry hybrid operation, decrease cooling water flowrate, increase allowable TDS, inclusion of PM _{2.5} , and inclusion of SSM emissions . SSM emissions have been reported for this facility. While operating in combined cycle mode (Scenarios 2, 3), the turbine exhaust must heat the catalyst for 3-6 hours after startup before the ammonia injection SCR is functional. Therefore, NOx and CO SSM emissions are permitted for operating Scenarios 1, 2 and 3. A modeling waiver was also issued for the SSM emissions (e-mail from Eric Peters to Ralph Williams, dated 3/11/09). |
| P211M2 | 12/28/2007 | TV - Admin | Change Responsible Official (RO) |
| 2466M1R1 | 12/28/2007 | NSR - Admin | Change RO |
| P211M1 | 09/25/2007 | TV - Renewal | |
| P211A-R1 | 06/06/2005 | Acid Rain - Renewal | |
| P211 | 06/06/2005 | TV - new | |
| P211AM1 | 07/23/2003 | Acid Rain - Mod | Corrected ORIS Code number |
| 2466M1 | 08/19/2002 | NSR – Sig. Rev. Schneider, Michael | Add duct burner – CC + BACT + limited hours |
| PSD-2466R2 | 05/21/2002 | NSR – Tech Rev | Add Dew Point Heater |
| 2466R1 | 04/05/2002 | NSR Admin | Denied – late |
| P211A | 01/18/2001 | Acid Rain - new | |
| PSD-2466 | 01/08/2001 | NSR – new Schneider, Michael | SC initially; later CC + HSRG + BACT SSM was not permitted. |

6.0 **Public Response/Concerns:** As of the date of permit issuance, this permit writer is not aware of any public comment.

7.0 **Compliance Testing:**

| Unit No. | Test Description | Test Date |
|----------|--|--------------|
| 1 | Tested in accordance with EPA test methods 1,2,3A,4,5, &E,9,10,19,25A and 202 for NOx, CO and PM as required by Title V permit P211-M1 and NSR permit 2466-M1 initial compliance testing after commencement combined cycle operation. | 5/21-22/2008 |
| 1,7 | Tested in accordance with EPA test methods 1,2,3A,4,5, &E,9,10,19,25A and 202 for NOx, CO and PM as required by Title V permit P211-M1 and NSR permit 2466-M1 initial compliance testing after commencement combined cycle operation with duct the duct burner in operation. | 6/26-27/2008 |
| 1,7 | Annual RATA was performed for NOx and CO CEMS. | 08/08/13 |

8.0 **Startup and Shutdown:**

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? Yes
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? Yes
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? No
- D. Were emissions from startup, shutdown, and scheduled maintenance operations calculated and included in the emission tables? Yes

9.0 **Compliance and Enforcement Status:** Per email dated Tuesday, March 1, 2016 from AQB Compliance and Enforcement, Jon Lutz, "Enforcement has no outstanding notice of violation and no settlement agreement for which all actions have not been completed for PNM, Afton Generating Station."

10.0 **Modeling:** A Modeling Waiver was granted for PSD2466-M4 via email by Sufi Mustafa on May, 28, 2014.

11.0 **State Regulatory Analysis(NMAC/AOCR):**

| 20 NMAC | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|---------|-------------------------------|---------------|---------------------|---|
| 2.1 | GENERAL PROVISIONS | Yes, Always | Entire Facility | The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements. |
| 2.3 | Ambient Air Quality Standards | N | Entire Facility | 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of NMAAQS are not applicable requirements under 20.2.70 NMAC, as defined by 20.2.3.9 NMAC, 20.2.3.9 NMAC does not limit the applicability of this part to sources required to obtain a permit under the minor NSR regulation, 20.2.72 NMAC, nor does it limit which terms and conditions of NSR permits issued pursuant to 20.2.72 NMAC are applicable requirements in a Title V permit. |
| 2.7 | Excess Emissions | Y | Entire Facility | Applies to all facilities' sources |

| 20 NMAC | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|----------------|---|----------------------|----------------------------------|--|
| 2.33 | Gas Burning Equipment - Nitrogen Dioxide | N | | Does not apply to turbines (AQB internal memo). |
| 2.34 | Oil Burning Equipment - Nitrogen Dioxide | N | | The combustion turbine, Unit 1, is oil burning equipment (external combustion emission sources, such as gas and oil fired boilers and heaters), but has heat input rate of 3.35E11 Btu/y, which is less than 1,000,000 million (1E12) British Thermal Units per year per unit. |
| 2.38 | Hydrocarbon Storage Facilities | N | | Applies only to petroleum production or processing facilities. |
| 2.61 | Smoke and Visible Emissions | Y | Units 1, 4, 7, & 8 | The combustion turbine (Unit 1), duct burner (Unit 7), and dew point heater (Unit 4) are Stationary Combustion Equipment. Unit 8, Fire Pump (under Title V only) |
| 2.70 | Operating Permits | Y | Entire Facility | The source is a Title V Major Source as defined at 20.2.70.7 NMAC. |
| 2.71 | Operating Permit Fees | Y | Entire Facility | Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC. |
| 2.72 | Construction Permits | Y | Entire Facility | NSR Permits are the applicable requirement, including 20.2.72 NMAC. |
| 2.73 | NOI & Emissions Inventory Requirements | Y | Entire Facility | Applicable to all facilities that require a permit. |
| 2.74 | Permits-Prevention of Significant Deterioration | Y | Entire Facility | Source is one of the 28 listed at 20.2.74.501 NMAC. PTE = 232 tpy NOx |
| 2.75 | Construction Permit Fees | N | Entire Facility | No, in accordance with 20.2.75.11.E an annual NSR enforcement and compliance fee shall not apply to sources subject to 20.2.71 NMAC. |
| 2.77 | New Source Performance | Y | See Sources subject to 40 CFR 60 | Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60. |
| 2.78 | Emissions Standards for HAPs, | N | See Sources subject to 40 CFR 61 | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 61. |
| 2.79 | Permits - Nonattainment Areas | N | | This facility is not located in a non-attainment area. |
| 2.82 | MACT Standards for Source Categories of HAPs. | Y | See sources subject to 40 CFR 63 | This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. |
| 2.84 | Acid Rain Permits | Y | | This facility is subject to 40 CFR 72. |

12.0 **Federal Regulatory Analysis:**

| Air Programs Subchapter C (40 CFR 50) | National Primary and Secondary Ambient Air Quality Standards | Applies (Y/N) | Unit(s) or Facility | Comments |
|--|---|----------------------|----------------------------|---|
| C | Federal Ambient Air Quality Standards | Y | Entire Facility | Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard. |

| NSPS Subpart (40 CFR 60) | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|-------------------------------------|--|----------------------|----------------------------|--|
| A | General Provisions | Y | Units 1 & 7 | Applies if any other subpart applies and Da and GG apply. |
| 40 CFR60.40a, Subpart Da | Performance Standards for Electric Utility Steam Generating Units | Y | Unit 7 | Establishes PM, SO ₂ and NO _x emission limits/standards of performance for Unit 7, a steam generator. The duct burner (Unit 7) has a heat input rate of 455 MMBtu/hr, which exceed the 250 MMBtu/hr threshold. Construction commenced 1/22/2002, after the 9/18/1978 applicability date. |
| 40CFR60.40b, Subpart Db, | Electric Utility Steam Generating Units | N | | Facilities meeting the applicability requirements of Subpart Da are not subject to this Subpart (§60.40b(3)) |
| 40 CFR 60, Subpart Ka | Standards of Performance for Storage Vessels for Petroleum Liquids | N | | Tank Unit T-1 has a storage capacity greater than 151,416 liters (40,000 gallons) that could be used to store petroleum liquids for which construction is commenced after May 18, 1978. However, this tank has been converted to water storage only. |
| 40 CFR 60.330 Subpart GG | Stationary Gas Turbines | Y | Unit 1 | Unit 1 has a heat input of 1382 MMBtu/hour, which is greater than the 10 MMBtu/hour threshold. This unit was installed on 1/22/2002 which is after the October 3, 1977 applicability date. |
| 40 CFR Part 60 Subpart III (Quad-I) | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | N | | Unit 8 is a 265 hp emergency fire pump manufactured and installed in January 2002. Since manufacture date is prior to July 1, 2006 it is not applicable to Subpart III. |

| NESHAP Subpart (40 CFR 61) | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|-----------------------------------|--------------------|----------------------|----------------------------|--|
| A | General Provisions | N | | Applies if any other subpart applies, no subparts apply. |

| MACT Subpart (40 CFR 63) | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|---------------------------------|--|----------------------|----------------------------|---|
| A | General Provisions | Y | Unit 8 | Applies if any other subpart applies and Subpart ZZZZ applies. |
| 40 CFR 63 Subpart ZZZZ (Quad Z) | National Emissions Standards for Hazardous Air Pollutants for Stationary | Y | Unit 8 | Unit 8 is a 265 hp emergency fire pump. It is subject to limited provisions of Subpart ZZZZ. Subpart ZZZZ requires annual maintenance of the engine |

| MACT Subpart (40 CFR 63) | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|--------------------------|---|---------------|---------------------|--|
| | Reciprocating Internal Combustion Engines (RICE MACT) | | | per 63.6603(a) Table 2d(4). Subpart ZZZZ limits annual hours of operation per 63.6640(f)(1) and (4). |

| Miscellaneous | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|---------------|---------------------------------|---------------|---------------------|--|
| 40 CFR 64 | Compliance Assurance Monitoring | N | | 40CFR64, Compliance Assurance Monitoring, requires that certain emission units at facilities that require a Title V Operating Permit perform monitoring to assure compliance with applicable emission limitations. |

Applicability, per 40CFR64.2, is limited to those units that are subject to a non-exempt emission limit, use a control device to achieve compliance and would, by itself, be classified as a major Title V source in the absence of controls. During combined cycle operation AGS uses an SCR unit to assure compliance with NOx emission limits from the turbine/duct burner emission sources (Emission Units 1 and 7). There are no control devices for any other air emissions. Therefore CAM applies only to NOx emissions. AGS has a CEMS (continuous emissions monitoring system) on the combined cycle stack (STK1B) that monitors NOx emissions during routine, SSM and malfunction operations. The use of a CEMS is presumptively acceptable to meet all CAM requirements. Per 40CFR64.3(d)(1), "If a CEMS, ...is required pursuant to other authority under the Act or state or local law, the owner shall use such a system to satisfy the requirements of this part." 40CFR64.3(d)(2) states that the use of a CEMS that satisfies any of the listed monitoring requirements shall be deemed to satisfy the general design criteria in paragraphs (a) and (b) of the (i.e. 40CFR64) section. One of the listed monitoring requirements, 40CFR64.3(d)(2)(iv), is Part 75, Acid Rain. 20.2.84NMAC, Acid Rain Permits, is an applicable requirement and AGS is required to perform NOx CEMS monitoring per the requirements of 40CFR75 under both the current NSR permit (2466M2 3(a)) and the current Operating Permit (P211M2). Therefore, per 40CFR60.3(d)(1), AGS has satisfied the requirements of 40CFR64.3 and per 40CFR64.4(b)(2), this represents a "presumptively acceptable" CAM plan.

Per 40CFR64.2(b)(1) all units are exempt since they are subject to Acid Rain program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.

| | | | | |
|-----------|--|---|--------|---|
| 40 CFR 68 | Chemical Accident Prevention | N | | 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. NSR & TV permits should include citation in applicability table in the permit, but no other specific permit conditions are required for NSR permits or TV permits. This is because the TV permit template includes a General Condition meeting the requirement of 68.215. |
| 40 CFR 70 | Title V- State Operating Permit Programs | N | | Operating Permit Program – is not applicable – New Mexico State has full delegated authority and Title V is administered under 20.2.70 NMAC. |
| 40 CFR 72 | Title IV – Acid Rain | Y | Unit 1 | (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 |

| Miscellaneous | Title | Applies (Y/N) | Unit(s) or Facility | Comments |
|-----------------------------------|---|---------------|---------------------|--|
| | | | | existing utility unit, except a unit under paragraph (b) of this section. Unit 1 has capacity > 25 MW, and is therefore subject to Title IV - Acid Rain. |
| 40 CFR 73 | Title IV – Acid Rain Sulfur Dioxide Allowance Emissions | Y | Unit 1 | The following parties shall be subject to the provisions of this part: (a) 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 |
| 40 CFR 75 | Acid Rain Continuous Emissions Monitoring | Y | Unit 1 | This facility is subject to Acid Rain CEMS. Unit 1 must have a CEMS for NOx and O ₂ . |
| Title IV – Acid Rain 40 CFR 76 | Acid Rains Nitrogen Oxides Emission Reduction Program | N | | §76.1 Applicability, (a) Except as provided in paragraphs (b) through (d) of this section, the provisions apply to each coal-fired utility unit that is subject to an Acid Rain emissions limitation or reduction requirement for SO ₂ under Phase I or Phase II pursuant to sections 404, 405, or 409 of the Act. AGS does not have any coal-fired units. |
| Title VI – 40 CFR 82 | Protection of Stratospheric Ozone – DOES NOT APPLY | N | | Not Applicable –facility does not “service”, “maintain” or “repair” class I or class II appliances nor “disposes” of the appliances. Note: Disposal definition in 82.152: Disposal means the process leading to and including: (1) The discharge, deposit, dumping or placing of any discarded appliance into or on any land or water; (2) The disassembly of any appliance for discharge, deposit, dumping or placing of its discarded component parts into or on any land or water; or (3) The disassembly of any appliance for reuse of its component parts. “Major maintenance, service, or repair means” any maintenance, service, or repair that involves the removal of any or all of the following appliance components: compressor, condenser, evaporator, or auxiliary heat exchange coil; or any maintenance, service, or repair that involves uncovering an opening of more than four (4) square inches of “flow area” for more than 15 minutes. |

13.0 **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:

| Unit No. | Source Description | Capacity | Insignificant Activity citation |
|----------|----------------------|-------------------|---------------------------------|
| T-1 | Water Tank | 1,000,000 gallons | IA List Item # 1.a |
| T-2 | Aqueous Ammonia Tank | 20,000 gallons | IA List Item # 1.a |
| T-3 | Sulfuric Acid Tank | 7,000 gallons | IA List Item # 1.a |
| T-4 | Bleach Tank | 7,000 gallons | IA List Item # 1.a |

14.0 **New/Modified/Unique Conditions** (Format: Condition#: Explanation):

All Conditions permitted in NSR PSD 2466-M4 are incorporated into this TV Renewal as written. Emergency Fire Pump Engine Unit 8 is now a regulated source per applicability of 40 CFR 63, Subpart ZZZZ. New conditions reflecting 20.2.61 Opacity, Hours of Operation, and Subpart ZZZZ requirements are incorporated for Unit 8.

15.0 **Cross Reference Table between NSR Permit PSD2466M4 and TV Permit P211R2. NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:**

| Changed by TV* | NSR Condition # | TV Section # |
|----------------|---|---|
| | A100 Introduction | A100 Introduction |
| | A101 Permit Duration | A101 Permit Duration |
| | A102 Facility Description | A102 Facility Description |
| X | Table 102.A Total Potential Emissions | Table 102.A Total Potential Emissions |
| X | A103 Facility: Applicable Regulations | A103 Facility: Applicable Regulations |
| X | A104 Facility: Regulated Sources | A104 Facility: Regulated Sources |
| | A105 Facility: Control Equipment | A105 Facility: Control Equipment |
| | A106 Facility: Allowable Emissions | A106 Facility: Allowable Emissions |
| | A107 Facility: Allowable SSM | A107 Facility: Allowable SSM |
| | A108 Facility: Allowable Operations | A108 Facility: Allowable Operations |
| | <i>NR for NSR</i> | A109 Facility: Reporting Schedules |
| | A110 Facility: Fuel Sulfur Requirements | A110 Facility: Fuel Sulfur Requirements |
| X | A111 Facility: 20.2.61 NMAC Opacity | A111 Facility: 20.2.61 NMAC Opacity |
| | A112 Facility: Alternative Operating Scenario | A112 Facility: Alternative Operating Scenario |
| | A400 Power Generation Industry | A600 Power Generation Industry |
| | A401 Turbines | A601 Turbines |
| X | A403 Engines – <i>Not Required</i> | A603 Engines |
| | A405 Cooling Towers | A605 Cooling Towers |
| | A408 Tanks | A608 Tanks |
| | A409 Selective Catalytic Reduction (SCR) System | A609 Selective Catalytic Reduction (SCR) System |

| Changed by TV* | NSR Condition # | TV Section # |
|-----------------------|---------------------------|--|
| | <i>Not Required</i> | Miscellaneous Documents |
| | <i>Not Required</i> | A800 40 CFR 72 Acid Rain Program Permit P008AR3 (Attached) |
| X | Part B General Conditions | Part B General Conditions |
| | Part C Miscellaneous | Part C Miscellaneous |

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

Notes: * TV staff will indicate by entering a “X” if the original NSR permit condition was modified or replaced for the purpose of clarification, typographical correction or due to increased stringency.

NSR staff will review the previous Title V permit for the so marked conditions and incorporate into any new NSR permit.

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

- A. All calculations and conditions were reviewed by Joseph Kimbrell, AQB, during review of NSR application PSD2466-M4. All conditions are incorporated as written.
- B. Table 102.A: Total Potential Pollutant Emissions are maintained as determined in PSD2466-M4. Notes detailing the determination of total potential emissions are located in the Database Summary.
- C. Emergency Fire Pump, Unit 8: Emissions for this unit were based on manufacturer supplied emission rates, tons per year were calculated based on 500 hours of operation per year. This unit is no longer a TV Insignificant Source due to the applicability of 40 CFR 63, Subpart ZZZZ.