

Pinal County Air Quality Control District

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PERMIT NUMBER V20695.000

In accord with the Regulations of the Pinal County Air Quality Control District, the following Permittee:

Salt River Project Agricultural Improvement and Power District

P.O. Box 52025, PAB 359

Phoenix, Arizona 85072

is authorized to operate the following facility: **Copper Crossing Energy and Research Center**

at the following location:

North Attaway Road and East Bella Vista Road

Pinal County, Arizona

under the terms and conditions and with the equipment set forth in the underlying specific permit provisions on pages 1 through 24.

Signed this 4th day of May, 2023.

Effective from the 4th day of May, 2023. Expires the 3rd day of May, 2028.



Scott DiBiase, Interim Control Officer

**SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT
PINAL COUNTY**

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1. Introduction

This permit pertains to an electrical power plant, owned and operated by Salt River Project Agricultural Improvement and Power District, a political subdivision of the State of Arizona. The SIC Code is 4911 and the NAICS Code is 221100. The facility, commonly known as Copper Crossing Energy and Research Center, is located at North Attaway Road and East Bella Vista Road, Pinal County, Arizona, upon a parcel also identified by Pinal County Assessor's Parcel #210-38-001A. The source is situated in an area classified as serious non-attainment for PM₁₀.

The facility will have a generating capacity of 99 MW-gross (approximately at ISO conditions), provided by two (2) natural gas fired aeroderivative GE LM6000PC simple cycle combustion turbines ("SCCT"), SCCT1 and SCCT2, that will drive electricity generators each approximately rated at 49.5 MW-gross generating capacity.

The plant includes two natural gas fired combustion turbines, each equipped with a combustion turbine technology which is comprised of an air inlet system, two compressor sections, a combustion section, and a turbine section. Each SCCT system will have a separate stack, with selective catalytic reduction (SCR) system for NO_x control and oxidation catalysts for the control of CO and VOC.

The facility is a synthetic minor with respect to Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NNSR), therefore is not subject to Best Available Control Technology (BACT) requirements and for the purposes of demonstrating continuous "synthetic minor" status (annual emissions of either NO_x, CO, VOC, SO₂ or PM_{2.5} are less than 250 tons per year, and annual emissions of PM₁₀ are less than 70 tons per year. Each SCCT stack is equipped with a continuous emission monitoring system (CEMS) for both NO_x and CO. NO_x is monitored in accordance with EPA's acid rain requirements. The facility uses CO CEMS, that meets the Performance Specifications contained in 40 CFR 60 Appendix B. Annual emissions of PM₁₀, SO₂, and VOC are calculated using non-instrumental test results along with fuel monitoring data. The source is subject to the operating permit requirements under Title V of the CAA.

2. Listing of Federally Enforceable Applicable Requirements [Mandated by 40 CFR §70.5(c)(4)] (Code §§3-1-060.B.2.d, 3-1-081.A.2, 3-1-081.A.8.a)

- A. Those specific provisions of the Pinal-Gila Counties Air Quality Control District ("PGAQCD") Regulations, as adopted by the Pinal County Board of Supervisors on March 31, 1975, and approved by the Administrator as elements of the Arizona State Implementation Plan ("SIP") at 43 FR 50531, 50532 (11/15/78), and specifically the following rules:

7-3-1.1	Emission Standards - Particulates - Visible Emissions - General
7-3-1.2	Emission Standards - Particulate Emissions - Fugitive Dust
7-3-1.3	Emission Standards - Particulates - Open Burning
7-3-1.7.A	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.C	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.D	Particulate Emissions - Fuel Burning Equipment
7-3-1.7.E	Particulate Emissions - Fuel Burning Equipment
7-3-2.2	SO ₂ Emissions - Fuel Burning Installations
7-3-4.1	CO Emissions - Industrial

- B. Those specific provisions of the Pinal-Gila Counties Air Quality Control District Regulations, as last amended by the Pinal County Board of Supervisors on June 16, 1980, and approved by the

Administrator as elements of the Arizona SIP at 47 FR 15579 (4/12/82), specifically, the following rules:

7-3-1.1 Visible Emissions; General

7-3-1.7.F Fuel Burning Equipment

- C. The New Source Performance Standard General Provisions, 40 CFR Part 60, Subpart A [40 CFR §§60.1 - 60.19 (1998)]; NSPS Standards of Performance for Stationary Gas Turbines, 40 CFR Part 60, Subpart KKKK [40 CFR §60.4300 *et seq.* (7/6/06)].
- D. The New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart TTTT, Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units [40 CFR §60.5508 *et seq.* (10/23/15)].
- E. The Acid Rain Program, 40 CFR Part 72 (1998) and related regulations, Sulfur Dioxide Allowance System, 40 CFR Part 73 (1998) and Continuous Emission Monitoring, 40 CFR Part 75 (1998).
- G. Asbestos NESHAP Compliance [40 CFR Part 61 §§145, 148, 150. Subpart M].

3. Compliance Certification

- A. Compliance Plan
[Mandated by 40 CFR §70.5(c)(8)] (Code §3-1-083A.7)

Insofar as the Permittee is currently in compliance, the compliance plan consists of continued adherence to the requirements of this permit and those requirements set forth in applicable regulations and statutes.

- B. Compliance Schedule
[Mandated by 40 CFR §§ 70.5(c)(8), 70.6(c)(3)] (Code §3-1-083A.7)

Insofar as the Permittee is currently in compliance, no compliance schedule to attain compliance is required.

4. Authority to Construct

[Federally enforceable - Code §§3-1-010, 3-1-040 (as amended 10/12/95) approved as a SIP Element at 61 FR 15717 (4/9/96)]

- A. In General

Emissions from this facility, specifically the equipment described in "Equipment Schedule" section below, and the operating configuration as defined below and more fully described in the application for permit, fall subject to the enforceable limitations identified throughout this permit. Therefore, based on the regulations in effect upon the date of issuance of this permit and a finding that allowable emissions from the equipment described in the Equipment Schedule will neither cause nor contribute to a violation of any ambient air quality standard even without any additional limitations, this permit constitutes authority to construct and operate such equipment.

- B. Equipment/Controls Authorized and Required
(Code §3-3-250.A.1)

- 1. The facility has two (2) natural gas fired, simple cycle General Electric LM6000 PC combustion turbines, each rated at a higher heat value of 490 mm btu/hr.
- 2. The Permittee shall install, calibrate, maintain and operate continuous

emissions monitoring systems (CEMS) on SCCT1 and SCCT2, and record the output of the system, for measuring nitrogen oxides and carbon monoxide emissions to the atmosphere during startup and shutdown events and the normal operation of the combustion turbines, and to measure the amount of fuel used. Monitoring equipment shall be installed and operated in accordance with the plan submitted to the district by the permittee.

3. Each SCCT shall be equipped with a SCR control for NOX.
4. Each SCCT shall be equipped with an oxidation catalyst control for CO and VOCs.

5. Emission Limitations
[Mandated by 40 CFR §70.6(a)(1)]

A. Applicable Limitations
 (Code §3-1-082)

Where different standards or limitations apply under this permit, the most stringent combination shall prevail and be enforceable.

B. Allowable Emissions
 (Code § 3-1-040)

Permittee is authorized to discharge or cause to discharge into the atmosphere those emissions of air contaminants as set forth in Section 4 of this permit. Unless exempted as an insignificant activity under Code §1-3-140.79a, as a categorical exemption under Code §3-1-040.C., or authorized by a separate permit or by a revision or operational change allowed under this permit or under Chapter 3, Article 2 of the Code, Permittee shall not commence construction of, operate or make any modification to this source in a manner which will cause emissions of any regulated air pollutant in excess of the de minimis amount.

C. Facility Wide Emission Limits
 (Codes §§3-1-084)

1. The Permittee shall not cause or allow the combined PM/PM10/PM2.5 emissions from SCCT1 and SCCT2 to exceed 40.2 tons per 12-month rolling total sum (combined for normal operation and startup/shutdown duration).
2. The Permittee shall not cause or allow the combined NOX emissions from SCCT1 and SCCT2 to exceed 60.9 tons per 12-month rolling total sum (combined for normal operation and startup/shutdown duration).
3. The Permittee shall not cause or allow the combined VOC emissions from SCCT1 and SCCT2 to exceed 37.5 tons per 12-month rolling total sum (combined for normal operation and startup/shutdown duration).
4. The Permittee shall not cause or allow the combined CO emissions from SCCT1 and SCCT2 to exceed 106.5 tons per 12-month rolling total sum (combined for normal operation and startup/shutdown duration).
5. The Permittee shall limit the natural gas annual combined heat input to SCCT1 and SCCT2 to 7,654,780 MMBtu, based on a rolling 12-month average.

D. NSPS Emission Limits

1. NOX Emission Limitations – Subpart KKKK

[40 CFR §60.4320(a), Table 1, §60.4350(g)]

Permittee shall comply with the following:

- a. NOX emission limit of 25 ppm at 15% O₂ or 1.2 lb/MWh (for a combustion turbine firing natural gas with heat input greater than 50 MMBtu per hour and less than or equal to 850 MMBtu per hour) on a four (4) hour rolling average basis while the combustion turbines are operating at greater than or equal to 75% of peak load.
 - b. NOX emission limit of 96 ppm at 15% O₂ or 4.7 lb/MWh (for a combustion turbine firing natural gas with output greater than 30 MW) on a four (4) hour rolling average basis while the combustion turbines are operating at less than 75% of peak load.
2. SO₂ Emission Limitations – Subpart KKKK
[40 CFR §60.4330.(a).(1) & (a).(2), Table 2]
- a. Permittee shall not cause to be discharged into the atmosphere from the stationary combustion turbine any gases which contain SO₂ in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output.
 - b. Permittee shall not burn in stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO₂/J or 0.06 lb SO₂/MMBtu heat input.
3. CO₂ Emission Limitation – Subpart TTTT
[40 CFR §60.5520.(a), Table 2]
- a. Newly constructed or reconstructed stationary combustion turbine that supplies its design efficiency or 50 percent, whichever is less, times its potential electric output or less as net-electric sales on either a 12-operating month or a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis, shall not discharge from the affected EGU any gases that contain CO₂ in excess of 50 kg CO₂ per gigajoule (GJ) of heat input (120 lb/CO₂/MMBtu).
 - b. The Permittee shall only use natural gas with a consistent chemical composition that results in a consistent emission rate of 160 lb CO₂/MMBtu or less in the combustion turbines.
 - c. The Permittee shall limit the net electric output for each unit to no more than the design efficiency or 50%, whichever is less, times the potential electric output, on a 3 calendar year rolling average. The design efficiency and potential electric output will be determined during the initial performance test using the methods referenced in 40 CFR 60 Subpart TTTT.
4. Start-up and Shutdown Limitations
1. Definitions
 - a. “Start-up” is defined as the 30-minute period following an initiation of fuel flow.
 - b. “Shutdown” is defined as the 9-minute period prior to shut-off the fuel supply.

- c. “Malfunction” is defined as any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.

E. Fuel-Burning Equipment - Particulate Emissions

1. SIP Limitation

[Currently federally enforceable pursuant to PGAQCD Reg. 7-3-1.7 (3/31/75) approved as a SIP element at 43 FR 50531 (11/15/78)]

For equipment with a heat input capacity of less than 4,000 million Btu per hour¹, particulate emissions shall not exceed:

$E = 1.02X^{-.231}$, where E = maximum emissions in lbs./hr. for each million BTU per hour heat input, and X = maximum heat input capacity in million BTU per hour.
(The SCCTs are rated at 490 mm BTU/hr each.)

2. Current Code Limitation
(§5-23-1010)

For equipment with a heat input capacity of less than 4,200 million Btu per hour, particulate emissions shall not exceed:

$E = 1.02Q^{0.769}$, where E = maximum emissions in lbs./hr. for each million BTU per hour heat input, and Q = maximum heat input capacity in million BTU per hour.

F. Particulate Matter Reasonable Precautions

[Currently federally enforceable pursuant to Code §4-2-040 (6/29/93) approved as a SIP element at 72 FR 41896 (8/1/07)]

- a. Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- b. Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- c. Permittee shall not disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- d. Permittee shall not crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- e. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such a manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming

airborne. Other reasonable precautions shall be taken, as necessary, to effectively prevent fugitive dust from becoming airborne.

- f. Permittee shall not cause, suffer, allow or permit transportation of materials likely to give rise to fugitive dust without taking reasonable precautions to prevent fugitive dust from becoming airborne. Earth and other material that is tracked out or transported by trucking and earth moving equipment on paved streets shall be removed by the party or person responsible for such deposits.

G. Surface Stabilization

[Federally enforceable pursuant to Code §4-1-030 (10/28/15) approved as a SIP element at 82 FR 20267 (5/1/17)]

1. Permittee shall not cause or allow visible fugitive dust emissions from open areas / vacant lots (areas not being utilized for an activity) to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
2. Permittee shall erect barriers or no trespassing signs upon evidence of trespass on open areas / vacant lots.
3. Permittee shall stabilize any open area / vacant lot greater than 1.0 acre that has 0.5 acre or more of disturbed surface and sign up for the Pinal County Dust Control forecast within 30 days of discovery. The open area / vacant lot shall be stabilized the day leading up to and the day that is forecast to be high risk for dust emissions.
4. Permittee shall not remove vegetation from open areas / vacant lots without applying dust suppressants before and during the weed abatement. Track out onto paved surfaces must be prevented or eliminated and dust suppressants must be applied following weed abatement to stabilize the entire surface.
5. Stabilization of open areas / vacant lots is determined by the drop ball, threshold friction velocity, flat vegetation or standing vegetation methods listed in PCAQCD Code 4-9-320.
6. Permittee shall not cause or allow visible fugitive dust emissions from unpaved lots (areas being utilized for an activity) greater than 5000 square feet to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.
7. Permittee shall not allow silt loading equal to or greater than 0.33 oz/ft² or allow the silt content to exceed 8% on unpaved lots greater than 5000 square feet.
8. Permittee shall stabilize unpaved lots greater than 5000 square feet by paving, applying a dust suppressant or graveling.
9. Permittee shall clean up track out on a paved public roadway that exceeds 50 feet within 24 hours of discovery and limit opacity to 20% or less while using a rotary brush or broom.
10. Permittee shall make a record of the control measures applied.

H. Generally Applicable Opacity Limits

1. SIP Limitation
[Federally enforceable pursuant to PGAQCD Reg. 7-3-1.1 (6/16/80) approved as a SIP Element at 47 FR 15579 (4/12/82)]

The opacity of any plume or effluent shall not be greater than 40 percent as determined by Reference Method 9 in the Arizona Testing Manual (ADEQ, 1992). Nothing in this limitation shall be interpreted to prevent the discharge or emission of uncontaminated aqueous steam, or uncombined water vapor, to the open air. Since the emissions from the steam generators are limited to the more stringent 20 percent opacity in §5.C.2.b. of this permit, this section is effectively limited to emissions from the cooling tower.

2. Visibility Limiting Standard

[Federally enforceable provision, pursuant to Code §2-8-300 (as amended 5/18/05) approved as a SIP element at 47 FR 15043 (3/27/06)]

The opacity of any plume or effluent from any point source not subject to a New Source Performance Standard adopted under Chapter 6 of the Code, and not subject to an opacity standard in Chapter 5 of the Code, shall not be greater than 20% as determined in Method 9 in 40 CFR 60, Appendix A. None of the existing point sources at the facility are currently subject to this standard.

3. Code Limitation Rotating Equipment Only
(Code §5-23-1010)

Permittee shall limit the opacity of emissions from any stationary rotating machinery such that opacity does not exceed 40% for longer than 10 consecutive seconds. Visible emissions when starting cold equipment shall be exempt from the requirement of this subparagraph for the first 10 minutes of operation.

I. Fuel Use Limitations

1. CT Fuels (Code §3-3-250.A.1)

In the CT units, Permittee is allowed to burn exclusively pipeline natural gas, provided Permittee shall not procure natural gas having a total sulfur content in excess of 0.25 grains per 100 cubic feet. For compliance reporting and emission inventory purposes, permittee shall quantify SO₂ emissions using an SO₂ emission rate of 0.001 lbs/mmBtu.

2. Other Fuels (Codes §§3-1-081.G, 5-23-1010.F)

Permittee shall not use used oil, used oil fuel, hazardous waste, and hazardous waste fuel (as defined in federal, state, or county codes and rules) in the steam generating units or the combustion turbines without first obtaining a separate permit or an appropriate permit revision.

J. General Maintenance Obligation

[Federally Enforceable Provision pursuant to code §3-1-081.E (9/5/01) approved as a SIP element at 66 FR 63166 (12/5/01)]

At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the permitted facility including associated air pollution control and monitoring equipment in a manner consistent with good air pollution control practice for minimizing emissions.

K. Generally Applicable Limits

1. Asbestos NESHAP Compliance

[Currently federally enforceable; 40 CFR Part 61, Subpart M] (Code §§7-1-030, 7-1-060)

Permittee shall comply with Code §§7-1-030.A. and 7-1-060 and 40 CFR Part 61, Subpart M, when conducting any renovation or demolition activities at the facility.

2. Stratospheric Ozone and Climate Protection
[Currently federally enforceable; 40 CFR Part 82 Subpart F]

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction.

L. Acid Rain Requirements
 (Code §§3-6-565, 3-1-081.A.6)

1. When provisions or requirements of the regulations incorporated pursuant to Code §3-6-565 (*i.e.* the Acid Rain Program) conflict with any of the other applicable requirements set forth in this permit, the regulations incorporated under §3-6-565 shall apply and take precedence.
2. No permit revision shall be 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 revision under any other applicable requirement. Code §3-1-081.A.6.a.
3. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement. Code §3-1-081.A.6.b.
4. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Part IV of the CAA, commonly known as CAA Title IV. Code §3-1-081.A.6.c.
5. All of the following are prohibited:
 (Code §3-1-081.A.6.d.)
 - a. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - b. Exceedances of applicable emission rates specified in this permit.
 - c. The use of any allowance prior to the year for which it was allocated.
 - d. Contravention of any other provision of this permit.

M. Additional Plant-Wide Requirements

1. Sandblasting - Plant Wide
 (Code §5-4-160.)

Permittee shall use at least one of the following control measures during sandblasting operations:

- a. Vacuum collection system.
- b. Confined blasting.
- c. Wet abrasive blasting.
- d. Hydroblasting.
- e. A control measure that is determined by the Control Officer to be equally effective to control particulate matter emissions.

2. Architectural Coatings

(Code §5-12-370)

Permittee shall not employ, apply, evaporate or dry any architectural coating, as defined in §5-12-370.C, for industrial or commercial purposes, material containing photochemically reactive solvent as defined in §5-9-280 or shall thin or dilute any architectural coating with a photochemically reactive solvent.

3. Other Spray Painting
(Code §5-13-390)

Permittee shall conduct spray painting operations except architectural coatings in an enclosed area designed to contain not less than 96% by weight of the overspray. An enclosed area means a 3-sided structure with walls a minimum of 8 feet high.

4. Disposal
(Codes §5-12-370 and 5-13-390)

Permittee shall not, during any one day, dispose of a total of more than one and one-half gallons of any photochemically reactive solvent or of any material containing more than one and one-half gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

5. Cutback and Emulsified Asphalt
(Code §5-16-670)

Except as exempted in §5-16-680, Permittee:

- a. Shall not use or apply the following materials for paving, construction or maintenance:
 - i. Rapid cure cutback asphalt;
 - ii. Any cutback asphalt material, road oils or tar which contains more than 1.5% by volume VOCs which evaporate at 500F or less using ASTM Test Method D-402-76 or more than 27% by volume total solvent in the asphalt binder.
 - iii. Any emulsified asphalt or emulsified tar containing more than 3% by volume VOCs which evaporate at 500F or less using ASTM Test Method D-244-89.
- b. Shall not store within Pinal County any emulsified or cutback asphalt product which contains more than 1.5% by volume solvent-VOC unless such material lot included a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.
- c. Permittee shall keep monthly records of any use of asphaltic/bituminous material containing more than 1.5 percent by volume solvent-VOC.

6. Compliance Demonstration

A. Non-NSPS and NSPS Subpart KKKK NOX Testing
[Mandated by 40 CFR §70.6(a)(3) Codes §§3-1-160 & 3-1-170, R18-2-311, R18-2-312]

1. Initial Performance Testing

Within 60 days after achieving maximum production rate of each CT (SCCT1 and SCCT2) but no later than 180 days after the initial start-up of the CTs, Permittee shall conduct performance tests, using standard test methods approved by the EPA (40 CFR Part 60) specified below. If any change to the test methods and procedures specified in this permit condition are approved, the Permittee shall submit an application to revise the permit to reflect the approved alternate test methods. These tests shall be performed at a maximum heat input capacity available on the day of testing. The continuous monitoring systems required by this permit shall be operating prior to conducting the performance tests. The performance tests shall address:

- a. Nitrogen oxides emissions: Ref. Part 60, App. A, Ref. Method 7E **or** use NOX CEMS RATA as the initial NOX performance test (NSPS Subpart KKKK, 40 CFR Part §60.4400.(b).(5), §60.4405)
- b. Carbon monoxide emissions: Ref. Part 60, App. A-4, Ref. Method 10
- c. Particulate matter emissions (PM₁₀/PM_{2.5}): Ref. Part 60, App. A-3, Ref. Method 5 and Ref. Part 51 App. M, Ref. Method 202 for condensable PM.
- d. Volatile organic compound emissions (VOC): Ref. Part 60, App. A-7, Ref. Method 25a

2. Test Protocol

Test protocols for all the tests shall be submitted to the District at least thirty (30) days prior to the test.

3. Performance Test Notice

Notice of any performance test required by this permit shall be submitted to the District at least thirty days (30) days prior to running the test.

4. Test Report

A copy of each test report shall be submitted to the District for approval within forty-five (45) days after the test. In addition to any other information required under this permit, the test report shall specifically define that the following pollutants meet the emission limitations specified in §Section 5.C of this permit:

- a. NOX emissions rates, defined as function of heat input
- b. PM₁₀ emission rates, defined as a function of heat input
- c. CO emission rates, defined as a function of heat input
- d. VOC emission rates, defined as a function of heat input

5. Recurring Testing Cycle

- i. Performance tests shall be repeated within 5 years of the previous performance test in accordance with Section §6.A.1 of this permit.
- ii. Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test) in accordance with Section §6.A.1.a of this permit. If the Permittee elects to demonstrate compliance using the NOX-diluent CEMS, no subsequent performance tests are required, and RATA shall be performed at the frequency required by 40 CFR Part 75, Appendix B, Sections 2.3.1.1 or 2.3.1.2 as applicable.

6. NSPS (Subpart TTTT) Greenhouse Gas Emissions for Electric Generating Units Testing Requirements ***[Federally enforceable pursuant to 40 CFR 60.5580]***

Design efficiency of the combustion turbines shall be determined using one of the following methods: ASME PTC 22 Gas Turbines (incorporated by reference, see §60.17), ASME PTC 46 Overall Plant Performance (incorporated by reference, see §60.17) or ISO 2314 Gas turbines—acceptance tests (incorporated by reference, see §60.17).

B. Compliance Requirements Subpart KKKK
[40 CFR Part §60.4333]

Permittee shall operate and maintain all the stationary combustion turbines' air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

C. Monitoring Requirements Subpart KKKK
[40 CFR §60.4335(b), §60.4340(a), §60.4345(a)]

1. Permittee shall use NOX continuous emission monitoring system (CEMS) installed, certified, and operated in accordance with 40 CFR Part 75 Appendix A.
2. NOX CEMS RATA may be used in place of demonstrating compliance with an annual performance test.

D. Monitoring Requirements Subpart TTTT
[40 CFR §60.5520(d), §60.5525]

1. Stationary combustion turbines subject to a heat input-based standard of this subpart that are only permitted to burn one or more uniform fuels with a consistent chemical composition (*i.e.*, uniform fuels) that result in a consistent emission rate of 160 lb CO₂/MMBtu or less shall maintain purchase records for permitted fuels.
2. Permittee shall maintain purchase records for the permitted fuels.

E. General Monitoring Requirements
[Mandated by 40 CFR §70.6(a)(3)]

1. Instrumental Emissions Monitoring - Oxides of Nitrogen
 [40 CFR 60.47a(c) & (d), Code §3-1-150.]

Permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system in accord with requirements of 40 CFR Part 75, and record the output of the system, for measuring:

- a. Nitrogen oxides emissions discharged to the atmosphere during startup, shutdown, and normal operations of the combustion turbines.
- b. Either the oxygen or carbon dioxide content of the flue gases from each unit, with the measurement taken where the NO_x emissions are monitored.
- c. On a calendar-month basis, Permittee shall generate a record of cumulative actual nitrogen oxide emissions from SCCT1 and SCCT2, emitted for the previous 12-months, and shall compare that total to the annual nitrogen oxides emission limitation imposed under Section §5.C.2 of this permit. Permittee shall maintain a record of those monthly total calculations, and monthly conclusion regarding compliance with the NOX cap.

2. Instrumental Emissions Monitoring - Carbon Monoxide
[Code §3-1-150.]
 - a. On each unit, Permittee shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring carbon monoxide emissions to the atmosphere. Monitoring equipment required under this subsection shall be installed and operated in accord pursuant to a plan submitted to the District by the permittee at least 120 days prior to the initial performance tests required under this permit. The plan shall give due consideration to the requirements of 40 CFR Part 60, Appendix Specifications 4 and/or 4a.
 - b. On a calendar-month basis, Permittee shall generate a record of the cumulative actual carbon monoxide emissions from SCCT1 and SCCT2, emitted for the previous 12-months, and shall compare that total to the annual carbon monoxide emission limitation imposed under §Section 5.C.4 of this permit. Permittee shall maintain a record of those monthly total calculations, and monthly conclusions regarding compliance with the CO cap.
3. Parametric Emission Monitoring – Particulate Matter
 - a. By the 10th day of each month, Permittee shall calculate and record the quantity of PM/PM10/PM2.5 emissions from SCCT1 and SCCT2, separately for each unit, for the previous calendar month. Calculations shall be performed using records of fuel use data, startup and shutdown events, and emission factors, as provided in paragraph c below.
 - b. By the 10th day of each month, Permittee shall calculate and record the Combined PM/PM10/PM2.5 emissions from SCCT1 and SCCT2 on a rolling 12-month total sum basis. This value shall be calculated as the sum of the emissions from both units during the previous month and during the preceding eleven months. Permittee shall compare this 12-month total to the annual PM/PM10/PM2.5 emission limitation under Section §5.C.1 of this permit. Records of the monthly total calculations and compliance with the PM/PM10/PM2.5 emission limitations shall be maintained.
 - c. Monthly total PM/PM10/PM2.5 emissions from each of SCCT1 and SCCT2 shall be calculated, separately for each unit as the sum of the emissions from that unit during startup and shutdown events, calculated as provided in paragraph d below, and the emissions from that unit during non-startup/shutdown periods, calculated as provided in paragraph e below.
 - d. PM/PM10/PM2.5 emissions from startup and shutdown events at a combustion turbine shall be calculated as the product of the number of events and an approved emission factor of 5.1 pounds per event. An event is one startup followed by one shutdown.
 - e. PM/PM10/PM2.5 emissions during non-startup/shutdown operating periods at a combustion turbine shall be calculate as the product of the cumulative heat input during such period, expressed in MMBtu, and the approved emission factor, expressed in lb/MMBtu:
 - i Permittee shall use an approved PM/PM10/PM2.5 emission factor of 0.011 lb/MMBtu to calculate emissions from a combustion turbine during operating periods from the date of initial startup of a combustion turbine through the last day of the calendar month during which PCAQCD first

approves a test-derived emission factor for such combustion turbine in accordance with paragraph f below.

- ii. Following approval of a test-derived PM/PM10/PM2.5 emission factor for SCCT1 and SCCT2 by PCAQCD in accordance with paragraph f below Permittee shall use the approved test-derived PM/PM10/PM2.5 emission factor to calculate emissions during operating periods beginning with the first day of the calendar month after such approval. Permittee shall continue to use such approved test-derived PM/PM10/PM2.5 emission factor until it is superseded by approval of a new test-derived PM/PM10/PM2.5 emission factor for SCCT1 and SCCT2.
 - f. During each PM/PM10/PM2.5 performance test conducted at SCCT1 and SCCT2 pursuant to Section §6.A of this permit, Permittee shall calculate a test-derived PM/PM10/PM2.5 emission factor for such combustion turbine and shall submit such emission factor to PCAQCD for approval. The test derived emission factor shall be calculated as the arithmetic mean of the emission factor results for all valid runs conducted as part of such performance test. The emission factor result for each run shall be calculated by dividing the measured emission rate during that run, expressed in lb/hr by the heat input rate during that run, expressed in MMBtu/hr.
4. Parametric Emissions Monitoring - Volatile Organic Compounds
[Code §3-1-150.]
- a. By the 10th day of each month, Permittee shall calculate and record the quantity of VOC emissions from SCCT1 and SCCT2, separately for each unit, for the previous calendar month. Calculations shall be performed using records of fuel use data, startup and shutdown events, and emission factors, as provided in paragraph c below.
 - b. By the 10th day of each month, Permittee shall calculate and record the combined VOC emissions from SCCT1 and SCCT2 on a rolling 12-month total sum basis. This value shall be calculated as the sum of the emissions from both units during the previous month and during the preceding eleven months. Permittee shall compare this 12-month total to the annual VOC emission limitation under Section §5.C.3 of this permit. Records of the monthly total calculations and compliance with the VOC emission limitations shall be maintained.
 - c. Monthly total VOC emissions from each of SCCT1 and SCCT2 shall be calculated, separately for each unit as the sum of the emissions from that unit during startup and shutdown events, calculated as provided in paragraph d below, and the emissions from that unit during non-startup/shutdown periods, calculated as provided in paragraph e below.
 - d. VOC emissions from startup and shutdown events at SCCT1 and SCCT2 shall be calculated as the product of the number of events and an approved emission factor of 2.7 pounds per event. An event is one startup followed by one shutdown.
 - e. VOC emissions during non-startup/shutdown operating periods at SCCT1 and SCCT2 shall be calculate as the product of the cumulative heat input during such period, expressed in MMBtu, and the approved emission factor, expressed in lb/MMBtu:

- i. Permittee shall use an approved VOC emission factor of 0.009 lb/MMBtu to calculate emissions from a combustion turbine during operating periods from the date of initial startup of a combustion turbine through the last day of the calendar month during which PCAQCD first approves a test-derived emission factor for such combustion turbine in accordance with paragraph f below.
 - ii Following approval of a test-derived VOC emission factor for SCCT1 and SCCT2 by PCAQCD in accordance with paragraph f below, Permittee shall use the approved test-derived VOC emission factor to calculate emissions during operating periods beginning with the first day of the calendar month after such approval. Permittee shall continue to use such approved test-derived VOC emission factor until it is superseded by approval of a new test-derived VOC emission factor for such combustion turbine.
- f. During each VOC performance test conducted at SCCT1 and SCCT2, pursuant to Section §6.A of this permit, Permittee shall calculate a test-derived VOC emission factor for such combustion turbine and shall submit such emission factor to PCAQCD for approval. The test derived emission factor shall be calculated as the arithmetic mean of the emission factor results for all valid runs conducted as part of such performance test. The emission factor result for each run shall be calculated by dividing the measured emission rate during that run, expressed in lb/hr by the heat input rate during that run, expressed in MMBtu/hr.

5. Parametric Emissions Monitoring - Sulfur Dioxide
[Code §3-1-150.]

As a surrogate measurement for monitoring emissions of sulfur dioxide, Permittee shall maintain daily records reflecting total fuel consumption in each unit. On a cycle adequate to comply with the emission limitations and semi-annual reporting requirements under this permit, Permittee shall utilize the SO₂ emission calculation methodology set forth in 40 CFR part 75, Appendix D, to calculate and report SO₂ emissions. Permittee shall determine fuel sulfur content in accordance with the procedures set forth in 40 CFR Part 75, Appendix D.

6. General Parametric Emission Monitoring Requirements
[Code §3-1-150]

To provide a basis for the other aspects of parametric monitoring set forth below, Permittee shall maintain operating logs, which may be digital in form, detailing:

- a. Hours of operation for the SCCT1 and SCCT2 units in a manner that may be mapped to corresponding NO_x and CO monitoring records, defining periods of normal operations, startup operations, and shutdown operations of the units.
- b. Fuel flow/heat input to the SCCT1 and SCCT2 units, separately defining fuel flow/heat input during the various system operating modes, including during startup, during normal operation and during shutdown.
- c. By the 10th day of each month, Permittee shall calculate and record the total heat input from SCCT1 and SCCT2 separately for each unit, for the previous calendar month. Heat input shall be calculated following the procedures of 40 CFR Part 75, Appendix D.

- d. By the 10th day of each month, Permittee shall calculate and record the combined total heat input from SCCT1 and SCCT2 on a rolling 12-month total sum basis. This value shall be calculated as the sum of the heat input from both units during the previous month and during the preceding eleven months. Permittee shall compare this 12-month total to the annual heat input limitation under Section 5.C.5 of this permit. Records of the monthly total calculations and compliance with the heat input limitations shall be maintained.
- e. To assure compliance with the general maintenance obligation defined under this permit, Permittee shall maintain repair logs with regard to each turbine unit.

F. Excess Emissions - NO_x
[40 CFR Part 60, Subpart KKKK, Section §60.4380.(b)]

For turbines using continuous emission monitoring, excess emissions and monitoring downtime are defined as:

1. An excess emissions is any unit operating period in which the 4-hour or 30-day rolling average NO_x emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a “4-hour rolling average NO_x emission rate” is the arithmetic average of the average NO_x emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO_x emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO_x emission rate is obtained for at least 3 of the 4 hours. For the purposes of this subpart, a “30-day rolling average NO_x emission rate” is the arithmetic average of all hourly NO_x emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO_x emissions rates for the preceding 30 unit operating days if a valid NO_x emission rate is obtained for at least 75 percent of all operating hours.
2. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_x concentration, CO₂ or O₂ concentration, fuel flow rate, steam flow rate, steam temperature, and steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if the information is used for compliance purposes.
3. For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

G. Excess Emissions - SO₂
[40 CFR Part 60, Subpart KKKK, Section §60.4385]

If the option to monitor the sulfur content of the fuel is chosen, excess emissions and monitoring downtime are defined as:

1. For samples of gaseous fuel, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

2. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

H. Recordkeeping
[Mandated by 40 CFR §70.6(a)(3)] (Code §3-1-083)

1. Permittee shall maintain at the source, a file of all measurements, including continuous monitoring-system-, monitoring-device, and performance- testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; all records of maintenance/testing operations; and all other information required pursuant to any federally enforceable provision of this permit, recorded in a permanent form suitable for inspection.
2. Permittee shall record the following in a permanent logbook, which may be in written or digital form, for inclusion in the semiannual report:
 - a. Emissions of nitrogen oxides, carbon monoxide, particulate matter (PM10), volatile organic compounds, and sulfur dioxide;
 - b. Total natural gas consumed;
 - c. Run times associated with operation of each unit;
 - d. The number of start-up and shut-down cycles for each unit; and
 - e. Total net electrical output generated.
3. Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, maintenance/testing operations, or malfunction in the operation of the permitted facility or any air pollution control equipment.

I. Compliance Reporting Requirements Subpart KKKK
[40 CFR §60.4375]

1. For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, reports of excess emissions and monitor downtime shall be submitted in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.
2. For each affected unit that performs annual performance tests in accordance with §60.4340(a), a written report of the results of each performance test before the close of business on the 60 day following the completion of the performance test shall be submitted.

J. General Compliance Reporting
[Mandated by 40 CFR §§70.6(a)(3) and 70.6(c)(4)] (Code §3-1-083.A)

In order to demonstrate compliance with the provisions of this permit, the Permittee shall submit a semi-annual report containing the information required to be recorded pursuant to this permit. All instances of deviations from permit requirements shall be clearly identified in such reports. For brevity, such deviation reports may incorporate by reference any written supplemental upset reports filed by Permittee during the reporting period. The report shall be submitted to the District within 30 days after the end of each semiannual period. Appendix A of this permit is a form which may be used for the report.

K. Regular Compliance/Compliance Progress Certification
[Mandated by 40 CFR §§70.5(c)(8), 70.5(c)(9), 70.6(c)(4), 70.6(c)(5)]

Permittee shall annually submit to the Control Officer and also to the Administrator of the US EPA (Enforcement Office (AIR5), EPA Region 9, 75 Hawthorne St, San Francisco, CA 94105-3901) a certification of compliance with the provisions of this permit. The certification shall:

1. Be signed by a responsible official, namely the president, secretary, treasurer or vice-president of the corporation, or such other person as may be approved by the Control Officer as an administrative amendment to this permit;
2. Identify each term or condition of the permit that is the basis of the certification;
3. Verify the compliance status with respect to each such term or condition;
4. Verify whether compliance with respect to each such term or condition has been continuous or intermittent;
5. Identify the permit provision, or other, compliance mechanism upon which the certification is based; and
6. Be postmarked within thirty (30) days of the beginning of each calendar year.

7. **Other Reporting Obligations**

A. Deviation Reporting Requirement
 (Code §3-1-083.A.3.b.) ***[Mandated by 40 CFR §§70.6(a)(3)(iii)(B), 70.6(g)][40 CFR 63.6640.b]***

Permittee shall report any deviation from the requirements of this permit along with the probable cause for such deviation, and any corrective actions or preventative measures taken to the District within fifteen days of the deviation unless earlier notification is required by the provisions of Section 9.P. of this permit.

B. Annual Emissions Inventory
[Federally Enforceable Provision pursuant to code §3-1-103.A&B (2/22/95) approved as a SIP element at 65 FR 79742 (12/2/00)]

Permittee shall complete and submit to the District an annual emissions inventory, disclosing actual emissions for the preceding calendar year. The submittal shall be made on a form provided by the District. The inventory is due by the latter of March 31st, or ninety (90) days after the form is furnished by the District.

8. **Fee Payment**
[Mandated by 40 CFR §§70.6(a)(7), 70.9]

As an essential term of this permit, an annual permit fee shall be assessed by the District and paid by Permittee in accord with the provisions of Code Chapter 3, Article 7 generally, and Code §3-1-081.A.9 specifically. The annual permit fee shall be due on or before the anniversary date of the issuance of an individual permit, or formal grant of approval to operate under a general permit. The District will notify the Permittee of the amount to be due, as well as the specific date on which the fee is due.

9. **General Conditions**

A. Term
[Mandated by 40 CFR §70.6(a)(2)] (Code §3-1-089)

This permit shall have a term of five (5) years, measured from the date of issuance.

B. Basic Obligation

[Mandated by 40 CFR §§70.4(b)(15), 70.6(a)(6)(i), 70.6(a)(6)(ii), 70.7.b] (Code §3-1-081.)

1. The owner or operator ("Permittee") of the facilities shall operate them in compliance with all conditions of this permit, the Pinal County Air Quality Control District ("the District") Code of Regulations ("Code"), and consistent with all State and Federal laws, statutes, and codes relating to air quality that apply to these facilities. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application and may additionally constitute a violation of the Clean Air Act (1990).
3. All equipment, facilities, and systems used to achieve compliance with the terms and conditions of this permit shall at all times be maintained and operated in good working order.

C. Duty to Supplement Action

[Mandated by 40 CFR §§70.5(b), 70.6(a)(6)(v)] (Code §§3-1-050.H, 3-1-081.A.8.e, 3-1-110)

Even after the issuance of this permit, a Permittee, who as an applicant who failed to include all relevant facts, or who submitted incorrect information in an application, shall, upon becoming award of such failure or incorrect submittal, promptly submit a supplement to the application, correcting such failure or incorrect submittal. In addition, Permittee shall furnish to the District within thirty days any information that the Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit and/or the Code.

D. Right to Enter

[Mandated by 40 CFR §70.6(c)(2)] (Code § 3-1-132)

Authorized representatives of the District shall, upon presentation of proper credentials, be allowed:

1. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit;
2. to inspect any equipment, operation, or method required in this permit; and
4. to sample emissions from the source.

E. Transfer of Ownership

[Mandated by 40 CFR §70.7(d)(4)]

This permit may be transferred from one person to another by notifying the District at least 30 days in advance of the transfer. The notice shall contain all the information and items required by Code § 3-1-090. The transfer may take place if not denied by the District within 10 days of the receipt of the transfer notification.

F. Posting of Permit

(Code §3-1-100)

Permittee shall firmly affix the permit, an approved facsimile of the permit, or other approved identification bearing the permit number, upon such building, structure, facility or installation for which the permit was issued. In the event that such building, structure, facility or installation is so

constructed or operated that the permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of the equipment or maintained readily available at all times on the operating premises.

G. Permit Revocation for Cause
[Mandated by 40 CFR §70.6(a)(6)(iii)] (Code §3-1-140)

The Director of the District ("Director") may issue a notice of intent to revoke this permit for cause pursuant to Code §3-1-140, which cause shall include occurrence of any of the following:

1. The Director has reasonable cause to believe that the permit was obtained by fraud or material misrepresentation;
2. Permittee failed to disclose a material fact required by the permit application form or a regulation applicable to the permit;
3. The terms and conditions of the permit have been or are being violated.

H. Certification of Truth, Accuracy and Completeness
[Mandated by 40 CFR §§70.5(a)(2), 70.6(a)(3)(iii)(B)] [Federally enforceable - Code §§3-1-083.A.5, 3-1-175 (as amended 10/12/95) approved as SIP Elements at 61 FR 15717 (4/9/96)]

Any application form, report, or compliance certification submitted pursuant to the Code shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 3 of the Code shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

I. Renewal of Permit
[Mandated by 40 CFR §§70.5(a)(1)(iii), 70.7(c)]

Expiration of this permit will terminate the facility's right to operate unless either a timely application for renewal has been submitted in accordance with §§3-1-050, 3-1-055 and 3-1-060, or a substitute application for a general permit under §3-5-490. For Class I permit renewals, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of the permit expiration. For Class II or Class III permit renewals, a timely application is one that is submitted at least 3 months, but not greater than 12 months prior to the date of permit expiration.

J. Severability
[Mandated by 40 CFR §70.6(a)(5)]

Pursuant to Code § 3-1-081.A.7., the provisions of this permit are severable, and if any provision of this permit is held invalid the remainder of this permit shall not be affected thereby.

K. Permit Shield
[Mandated by 40 CFR §70.6(f)] (Code § 3-1-102.)

Subject to the following schedule of exclusions, compliance with the terms of this permit shall be deemed compliance with any applicable requirement identified in this permit. The permit-shield exclusions include:

1. PGCAQCD Rule §7-3-1.3 OPEN BURNING;
2. PGCAQCD Rule §7-3-4.1 INDUSTRIAL - CARBON MONOXIDE EMISSIONS.
3. Items listed in Section 10 of this permit as not being federally enforceable.

L. Permit Revisions
[Mandated by 40 CFR §70.7(d), 70.7(e)] (Code Chapter 3, Article 2)

1. This permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
2. The permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
3. Permit amendments, permit revisions, and changes made without a permit revision shall conform to the requirements in Article 2, Chapter 3, of the Code.
4. Revision to Obtain Authority to Reconstruct ***[Federally enforceable - 40 CFR 63.42(c)]*** Code §3-1-040.D.

Prior to commencing a reconstruction, as defined below, Permittee shall apply for and obtain a revision to this permit, which revised permit shall include a final and effective case-by-case determination pursuant to the provisions of 40 CFR 63.43 such that the emissions from the reconstructed facility will be controlled to a level no less stringent than the maximum achievable control technology emission limitation for new sources.

For purposes of this subsection, "reconstruction" is defined as the replacement of components at an existing process or production unit that in and of itself emits or has that potential to emit 10 tons per year of any HAP or 25 tons per year of any combination of HAP, whenever:

- a. The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable process or production unit; and
- b. It is technically and economically feasible for the reconstructed major source to meet the applicable maximum achievable control technology emission limitation for new sources established under 40 CFR Part 63, Subpart B.

M. Permit Re-opening
[Mandated by 40 CFR §§70.6(a)(6)(iii), 70.7(g), 70.7(g)] (Code §3-1-087.)

1. This permit shall be reopened if:
 - a. Additional applicable requirements under the Clean Air Act (1990) become applicable to this source, and on that date, this permit has a remaining term of three or more years. Provided, that no such reopening under this subparagraph is required if the effective date of the newly applicable requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to Code §3-1-089.C.
 - b. The Control Officer determines that it contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of it;
 - c. The Control Officer determines that it needs to be revised or revoked to assure compliance with the applicable requirements; or
 - d. The EPA Administrator finds that cause exists to terminate, modify, or revoke and reissue this permit.

2. If this permit must be reopened or revised, the District will notify the permittee in accord with Code §3-1-087.A.3.

N. Record Retention
[Mandated by 40 CFR §70.6(a)(3)(ii)(B)] (Code §3-1-083.A.2.b)

Permittee shall retain for a period of five (5) years all documents required under this permit, including reports, monitoring data, support information, calibration and maintenance records, and all original recordings or physical records of required continuous monitoring instrumentation.

O. Scope of License Conferred
[Mandated by 40 CFR §70.6(a)(6)(iv)] (Code §3-1-081.)

This permit does not convey any property rights of any sort, or any exclusive privilege.

P. Excess Emissions Reports; Emergency Provision
[Mandated by 40 CFR §70.6(g)] (Code §3-1-081.E, Code §8-1-030)

1. To the extent Permittee may wish to offer a showing in mitigation of any potential penalty, underlying upset events resulting in excess emissions shall reported as follows:
 - a. The permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. Such report shall be in two parts:
 - i. Notifications by telephone or facsimile within 24 hours or the next business day, whichever is later, of the time when the owner or operator first learned of the occurrence of excess emissions, including all available information required under subparagraph b. below.
 - ii. Detailed written notification within 3 working days of the initial occurrence containing the information required under subparagraph b. below.
 - b. The excess emissions report shall contain the following information:
 - i. The identity of each stack or other emission point where the excess emissions occurred.
 - ii. The magnitude of the excess emissions expressed in the units of the applicable limitation.
 - iii. The time and duration or expected duration of the excess emissions.
 - iv. The identity of the equipment from which the excess emissions occurred.
 - v. The nature and cause of such emissions.
 - vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.

- vii. The steps that were or are being taken to limit the excess emissions. To the extent this permit defines procedures governing operations during periods of start-up or malfunction, the report shall contain a list of steps taken to comply with this permit.
 - viii. To the extent excess emissions are continuous or recurring, the initial notification shall include an estimate of the time the excess emissions will continue. Continued excess emissions beyond the estimated date will require an additional notification.
2. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, 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 preventative maintenance, careless or improper operation, or operator error.
 3. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of the following subparagraph are met.
 4. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Control Officer by certified mail or hand delivery within 2 working days of the time when emissions limitations were exceeded due to emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

10. Additional provisions applicable to Title V Sources

- A. Enforcement by the Administrator and Citizens
[Mandated by 40 CFR §70.6(b)]

All terms and conditions in a part 70 permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act.

11. Equipment *[Mandated by 40 CFR §70.5(c)(3)(ii)]* (Code §3-1-050.B)

Equipment for which emissions are allowed by this permit are as follows:

Emission Unit	Manufacturer	Model	Serial #	Date	Quantity	Capacity
Gas Turbines (Simple Cycle)	GE	LM6000PC			2	490 mm btu/hr each

SCCT1-SCCT2						
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Appendix A

Semi-annual Report**Permit V20695.000****Abstract**

This constitutes a semi-annual report of all required monitoring, documenting emissions during the subject reporting period.

Reporting Period - January-June ____ Or July-December ____ Year ____

Facility - Salt River Project Agricultural Improvement and Power District
Copper Crossing Energy and Research Center
North Attaway Road and East Bella Vista Road, Pinal County, AZ

Fuel Consumption Report

Natural gas burned during reporting period - _____ MMBtu

Operations Report

Power generated during reporting period (SCCT1 and SCCT2) - _____ megawatt-hours

SCCT1

Normal Run Time hours
Start-up cycles each
Shut-down cycles..... each

SCCT2

Normal Run Time hours
Start-up cycles each
Shut-down cycles..... each

Emissions Report

Emissions of nitrogen oxides - _____ tons

Emissions of carbon monoxide - _____ tons

Emissions of particulate matter PM₁₀ - _____ tons

Emissions of particulate matter PM_{2.5} - _____ tons

Emissions of volatile organic compounds - _____ tons

Emissions of sulfur dioxide - _____ tons

Performance Testing

Were the initial performance tests performed as required under Section §6.A of this permit?

Yes_____ No_____

If yes, please list the dates of the most recent performance tests_____

Monitoring Requirements

Pursuant to the NO_x emission limitation of §5.C.2, did the monitoring requirements under §6.E.1 show continuous compliance during the reporting period? Yes_____ No_____

Pursuant to the CO emission limitation of §5.C.4, did the monitoring requirements under §6.E.2 show continuous compliance during the reporting period? Yes_____ No_____

Pursuant to the PM/PM10/PM2.5 emission limitation of §5.C.1, did the monitoring requirements under §6.E.3 show continuous compliance during the reporting period? Yes_____ No_____

Pursuant to the VOC emission limitation of §5.C.3, did the monitoring requirements under §6.E.4 show continuous compliance during the reporting period? Yes_____ No_____

Pursuant to the SO₂ emission limitations of §5.D.2, did the monitoring requirements under §6.E.5 show continuous compliance during the reporting period? Yes_____ No_____

Have repair logs been maintained pursuant to §6.E.6.f? Yes_____ No_____

Certification by Responsible Official

I certify that, based on information and belief formed after reasonable inquiry, that the statements and information in this report are true, accurate and complete.

Signed _____

Printed Name _____

Title _____

Contact Phone Number _____

Date_____

Email to: compliancereports@pinal.gov, or

Mail to: Pinal County Air Quality Control District
P.O. Box 987
Florence, AZ 85132