



FEB 2 7 2014

Mr. Ramiro Gonzalez CalPeak Power - Panoche, LLC 7365 Mission Gorge Rd, Suite C San Diego, CA 92120-1273

Re: Notice of Final Action - Title V Permit Renewal

> District Facility # C-3811 **Project # C-1123375**

Dear Mr. Gonzalez:

The District has issued the Final Renewed Title V Permit for CalPeak Power -Panoche, LLC. The preliminary decision for this project was made on May 17, 2013. A summary of the comments and the District's response to each comment is included as an attachment to the engineering evaluation.

The public notice for issuance of the Final Title V Permit will be published approximately three days from the date of this letter.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner Director of Permit Services

Enclosures

Mike Tollstrup, CARB (w/enclosure) via email CC:

Gerardo C. Rios, EPA (w/enclosure) via email CC:

> Seyed Sadredin Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

### Final Title V Permit Renewal Evaluation CalPeak Power - Panoche, LLC C-3811

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# TITLE V PERMIT RENEWAL EVALUATION Power Generation

Engineer: Gurpreet Brar

Date: February 5, 2014

Facility Number: C-3811

Facility Name: CalPeak Power - Panoche, LLC Mailing Address: 7365 Mission Gorge Rd, Suite C

San Diego, CA 92120-1273

Contact Name: Ramiro Gonzalez, Plant Manager

**Phone:** (619) 229-3770 ext 303

Responsible Official: JJ Fair Jr.

Title: General Manager

**Project #:** C-1123375

Deemed Complete: December 4, 2012

#### I. PROPOSAL

CalPeak Power - Panoche Corporation was issued a Title V permit on April 30, 2004. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the most recent renewal of the Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

#### II. FACILITY LOCATION

CalPeak Power - Panoche Corporation is located at 43699 West Panoche Road, Firebaugh in Fresno County.

#### III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

#### IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to use the following model general permit Templates:

#### A. Template SJV-UM-0-3 Facility Wide Umbrella

The applicant has requested to utilize template No. SJV-UM-0-3, <u>Facility Wide Umbrella</u>. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template. Template SJV-UM-0-3 conditions have been added as conditions 1 through 40 for the renewed facility wide requirements (C-3811-0-2) and replace conditions 1 through 40 of the existing facility wide requirements (C-3811-0-1).

#### V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the final Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the final permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's final actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate form model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the facility-wide requirements C-3811-0-2.

#### VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### A. Rules Updated

- District Rule 2020, <u>Exemptions</u>
   (amended December 20, 2007 ⇒ amended August 18, 2011)
- District Rule 2201, New and Modified Stationary Source Review Rule (amended December 18, 2008 ⇒ amended April 21, 2011)
- District Rule 2410, <u>Prevention of Significant Deterioration</u> (adopted June 16, 2011 ⇒ effective November 26, 2012)

#### B. Rules Removed

No rules were removed.

#### C. Rules Added

The following rule, applicable to this facility, has been adopted since issuance of the initial Title V permit.

 40 CFR 63 Subpart YYYY - <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Combustion Turbines</u>

#### D Rules Not Updated

- District Rule 1070, <u>Inspections</u> (amended December 17, 1992)
- District Rule 1080, Stack Monitoring (amended December 17,1992)
- District Rule 1081, Source Sampling (amended December 16, 1993)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4202, <u>Particulate Matter Emission Rate</u> (amended December 17, 1992)

- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- 40 CFR Part 60, Subpart A, Monitoring Requirements
- 40 CFR Part 60, Subpart GG, <u>New Source Performance Standards</u>; <u>Standard of Performance for Stationary Gas Turbines</u>
- 40 CFR 60 Subpart KKKK <u>Standards of Performance for Stationary Combustion Turbines</u>
- 40 CFR Part 64, Compliance Assurance Monitoring
- 40 CFR Part 72, Permits Regulation
- 40 CFR Part 73, Sulfur Dioxide Allowance System
- 40 CFR Part 75, Continuous Emission Monitoring
- 40 CFR Part 77, Excess Emissions

### VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

#### A. Rules Added

No non-federally enforceable rules have been added to the permit.

#### **B.** Rules Not Updated

District Rule 4102, Nuisance (as amended December 17, 1992)

 Condition 57 of facility-wide permit C-3811-0-2 is based on District Rule 4102 and will therefore not be discussed any further.

#### VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the most recent renewal of the Title V permit.

#### A. District Rule 2020-Exemptions

District Rule 2020 lists equipment which are specifically exempt from obtaining permits and specifies recordkeeping requirements to verify such exemptions. The amendments to this rule do not have any affect on current permit requirements and will therefore not be addressed in this evaluation.

#### B. District Rule 2201-New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's initial Title V permit was issued. This Title V permit renewal does not constitute a modification per section 3.26, defined as an action including at least one of the following items:

- Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
- 2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
- 3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
- 4) Addition of any new emissions unit which is subject to District permitting requirements.
- 5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Therefore, the updated requirements of this rule are not applicable at this time.

#### C. District Rule 2410 - Prevention of Significant Deterioration

The prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant. The provisions of this rule apply to any source and the owner or operator of any source subject to any requirement under Title 40 Code of Federal Regulations (40 CFR) Part 52.21 as incorporated into this rule.

There are no PSD requirements for this source. Therefore, the facility is not subject to this rule and no further discussion is required.

#### D. District Rule 2520 - Federally Mandated Operating Permits

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

# E. 40 CFR 63 Subpart YYYY - <u>National Emission Standards for</u> <u>Hazardous Air Pollutants for Stationary Combustion Turbines</u>

This subpart applies to stationary combustion turbines that are located at a major source of HAP emissions is a contiguous site under common control that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

As per District's Toxics Inventory, this facility is not major source of HAP emissions, requirements of this subpart does not apply.

## F. 40 CFR Part 60, Subpart GG, <u>Standard of Performance for Stationary</u> <u>Gas Turbines</u>

40 CFR Part 60 Subpart GG applies to all stationary gas turbines with a heat input greater than 10.7 gigajoules per hour (10.2 MMBtu/hr), that commence construction, modification, or reconstruction after 10/03/77. Each of the turbines within this project were installed in 2002. Therefore, this subpart applies to the turbines.

The following table has applicable requirements of this subpart and proposed conditions on the permits to meet those requirements:

Type of Requirement	Subpart GG, § 60.332, 60.333, 60.334 and 60.335	Proposed Requirement
Emissions Limit	60.332(a)(1) - 112 ppmv @ 15% O <sub>2</sub> over 4 hour rolling average (emission standard calculated using design heat rate data as 9142 Btu/kWh provided by the manufacturer) 60.334(J)(1)(iii) The 4-hour rolling average is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour. 60.333(a) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.	The NOx emission from gas turbine engine at all times during operating hours shall not exceed 112 ppmvd NOx @ 15% O2 over a 4-hour rolling average, including start-up and shutdown periods. The 4-hour rolling average is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour.  Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes.
Work place standards	60.333(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8% by weigh (8000 ppmw).	This unit shall be fired exclusively on PUC-quality natural gas which has a total sulfur content of less than or equal to 1.0 gr/100 scf.
	construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NO <sub>X</sub> emissions, the owner or operator may use CEMS determine excess emissions. 60.334(h)(3) The sulfur content of each fuel source shall be: (i) documented in a valid	The owner or operator shall certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NOx, CO and O2 concentrations.  The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract.

Type of Requirement	Subpart GG, § 60.332, 60.333, 60.334 and 60.335	Proposed Requirement
Reporting	60.334(J) the owner or operator shall submit reports of excess emissions and monitor downtime as required under §60.7(c), periods of excess emissions that shall be reported for all periods of unit operation, including startup, shutdown and malfunction are defined as follows: 60.334(J)(1)(iii) an hour of excess emissions emissions shall be defined as any operating hour in which 4-hour rolling average	applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx, CO or O2.
	NOx concentration exceeds applicable emissions limit; and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or diluent (or both).	The owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) on a semi annual basis. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction, for any 4-
	60.334(J)(5): All reports required under §60.7(c) shall be post marked by 30 <sup>th</sup> day following the end of each 6-month period.	consecutive rolling average that exceeds the NOx limit under 40 CFR 60.332(a)(1). For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j). All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each sixmonth period.
		If the total duration of NOx excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form in §60.7(d) shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the EPA or the Air District.
Testing	60.3354(a): Requires NOx performance testing using EPA method 20 or 7E and EPA method 3, 3A in appendix A to this part, to determine NO <sub>x</sub> and diluent concentration. Other acceptable alternative reference methods and procedures are given in paragraph (c) of this section.	The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit.

Conditions 6, 7, 8, 12, 20, 21, 28, 32, 33, 35, 39 and 40 on the proposed PTOs (C-3811-1-8 & -2-8) assure compliance with the requirements of this subpart.

#### G. 40 CFR Part 64, Compliance Assurance Monitoring

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

#### <u>C-3811-1-8 & -2-8 (49.5 MW Natural Gas-Fired Turbines):</u>

- 1) These units contains emission limits for  $NO_X$ ,  $SO_X$ ,  $PM_{10}$ , CO, and VOC.
- 2) These units have no add-on controls for SO<sub>X</sub> or PM<sub>10</sub> emissions. Therefore, this unit is not subject to CAM for SO<sub>X</sub> or PM<sub>10</sub> emissions. Based on 40 CFR 64.2(b)(1)(vi), NO<sub>X</sub> emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for NO<sub>X</sub>. However, this permit unit may be subject to CAM for CO and VOC emissions as it has add-on control in the form of an oxidation catalytic system.
- 3) The pre-control CO and VOC emissions are calculated as given below:

#### CO:

The CO emissions from these units are controlled by oxidation catalyst with control efficiency of 27% (per project #C-1010207), and the controlled emission factor is 16.6 lb-CO/hr as given on the current permit, and the maximum operating time of 8,760 hr/yr will be used to calculate uncontrolled emissions as given below:

Annual Uncontrolled PE =  $(16.6 \text{ lb-CO/hr})/(0.27) \times 8,760 \text{ hrs/yr}$ = 538,578 lb-CO/yr

The pre-control CO emissions are greater than the major source threshold of 100 tons-CO per year (200,000 lb/yr). Therefore, the turbines are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for CO.

#### VOC:

The VOC emissions from these units are controlled by oxidation catalyst with control efficiency of 33% (per project #C-1010207), and the controlled emission factor is 0.64 lb-VOC/hr as given on the current permit, and the maximum operating time of 8,760 hr/yr will be used to calculate uncontrolled emissions as given below:

Annual Uncontrolled PE =  $(0.64 \text{ lb-VOC/hr})/(0.33) \times 8,760 \text{ hrs/yr}$ = 16,989 lb-VOC/yr

The pre-control VOC emissions are less than the major source threshold of 10 tons-NOx per year (20,000 lb/yr). Therefore, the turbines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for VOC emissons.

The gas turbines operated at CalPeak Power - Panoche are already equipped with CEM systems for CO emissions, and the conditions on the proposed permits will be updated to satisfy Appendix P of 40 CFR Part 51, 40 CFR 60.13, 40 CFR Part 75, and Appendix B of 40 CFR Part 60 and therefore, compliance with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring.

 Conditions 5, 6, 8, 21, 29, 30, 34, 35 and 41 of the requirements for permit units C-3811-1-8 and C-3811-2-8 assure compliance with the requirements of the 40 CFR Part 64.

#### H. 40 CFR Part 72, Permits Regulation

The 24.7 MW simple-cycle natural gas fired turbines, permit unit C-3811-1 and C-3811-2, are subject to the provisions of the Title IV, Acid Rain Program of the Clean Air Act (40 CFR Part 72) since these units are "new unit" (commenced commercial operation on or after November 15, 1990) as defined in 40 CFR 72.2. By reference the requirements of 40 CFR Parts 73, 75, and 77 are included in 40 CFR Part 72. These provisions have been included as conditions 41 to 56 on facility-wide permit C-3811-0-2.

#### IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

#### A. Requirements Addressed by Model General Permit Templates

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit shields as granted in Model General Permit Template are included as conditions 39 and 40 of the facility-wide requirements (C-3811-0-2).

#### B. Requirements not Addressed by Model General Permit Templates

The applicant has not requested any permit shield other than as discussed above.

#### C. Obsolete Permit Shields From Existing Permit Requirements

There is no change to the existing permit shields already included in their Title V operating permit. Therefore, all of the existing permit shields will be maintained on the revised permit for this renewal project.

#### X. PERMIT CONDITIONS

See Attachment A – Renewed Title V Operating Permit.

#### XI. ATTACHMENTS

- A. Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Facility List
- D. Facility Comments / District Responses

# **ATTACHMENT A**

Renewed Title V Operating Permit





# **Permit to Operate**

FACILITY: C-3811

**EXPIRATION DATE: 05/31/2018** 

**LEGAL OWNER OR OPERATOR:** 

**MAILING ADDRESS:** 

CAL PEAK POWER - PANOCHE, LLC

ATTN: CALPEAK ACCOUNTING DEPT.

7365 MISSION GORGE RD, BLDG B, SUITE C

SAN DIEGO, CA 92120-1274

**FACILITY LOCATION:** 

43699 WEST PANOCHE RD

FIREBAUGH, CA 93622-9720

**FACILITY DESCRIPTION:** 

**POWER GENERATION** 

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Executive Director / APCO

# San Joaquin Valley Air Pollution Control District

**FACILITY:** C-3811-0-2 **EXPIRATION DATE:** 05/31/2018

## **FACILITY-WIDE REQUIREMENTS**

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District, [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: CAL PEAK POWER - PANOCHE, LLC
Location: 43699 WEST PANOCHE RD, FIREBAUGH, CA 93622-9720
C3811-0-2: Feb 10 2014 3:20PM - KEASTMD

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.01 Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V **Permit**
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V **Permit**
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Fresno County Rule 110. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V **Permit**
- 41. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 42. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, [40 CFR 75] Federally Enforceable Through Title V Permit
- 43. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 44. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 45. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 46. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
- 47. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 48. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit

- 49. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 50. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
- 51. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 52. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 53. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 54. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 55. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 56. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit
- 57. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 58. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit
- 59. On April 30, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin May 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3811-1-8 **EXPIRATION DATE: 05/31/2018** 

#### **EQUIPMENT DESCRIPTION:**

24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-2)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the common exhaust duct from C-3811-1 and C-3811-2. Common exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas turbine engine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V
- The owner or operator shall certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NOx, CO and O2 concentrations. [40 CFR 60.334(c), District Rules 1080 and 4703, and 40 CFR 641 Federally Enforceable Through Title V Permit
- The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District. the ARB and the EPA. [40 CFR 60.334(b)(2) and 40 CFR 60.334(c), and District Rule 1080] Federally Enforceable Through Title V Permit
- The NOx, CO and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and 40 CFR 60.334(c), District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

Facility Name: CAL PEAK POWER - PANOCHE, LLC Location: 43699 WEST PANOCHE RD, FIREBAUGH, CA 93622-9720 C-3811-1-8: Feb 10 2014 3:20PM - KEASTMD

- 10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and provisions to sample stack gases at ground level with a portable NOx, CO, and O2 analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and Fresno County Rule 406] Federally Enforceable Through Title V Permit
- 13. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 14. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 15. Number of startups and shutdowns shall not exceed 365 in one calendar year. [District Rules 2201] Federally Enforceable Through Title V Permit
- 16. Each startup or shutdown shall not exceed 30 minutes. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 17. Combined emission rates from units C-3811-1 and C-3811-2 during startup or shutdown shall not exceed: 8.28 lb NOx/hr, 1.42 lb SOx/hr, 3.42 lb PM10/hr, 35.46 lb CO/hr, and 1.28 lb VOC/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Except during startup and shutdown, emission rates from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed any of the following limits: PM10 3.24 lb/hr, SOx (as SO2) 1.42 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 6.16 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 1.28 lb/hr, CO 30 ppmvd @ 15% O2 and 33.2 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. Except during startup and shutdown, emission rates from gas turbine engine C-3811-1 shall not exceed any of the following limits: PM10 1.62 lb/hr, SOx (as SO2) 0.71 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 3.08 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 0.64 lb/hr, CO 30 ppmvd @ 15% O2 and 16.6 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 20. The NOx emission from gas turbine engine at all times during operating hours shall not exceed 112 ppmvd NOx @ 15% O2 over a 4-hour rolling average, including start-up and shutdown periods. The 4-hour rolling average is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour. [40 CFR 60.332(a)(1) and 60.334(j)(1)(iii)(A)] Federally Enforceable Through Title V Permit
- 21. An hour of excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit in §60.332(a)(1), and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx, CO or O2. [40 CFR 64 and 40 CFR 60.334(j)(1)(iii)] Federally Enforceable Through Title V Permit
- 22. Daily emissions from gas turbine engine C-3811-1 shall not exceed any of the following emission limits, regardless of type of operation: 74.0 lb NOx/day, 17.0 lb SOx/day, 38.9 lb PM10/day, 385.2 lb CO/day, and 15.4 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit

- 23. Combined emission from units C-3811-1 and C-3811-2 shall not exceed any of the following emission limits. regardless of type of operation: 148.0 lb NOx/day, 34.0 lb SOx/day, 77.8 lb PM10/day, 770.0 lb CO/day, and 30.8 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. NOx emissions from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed 20,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bx(c-d)/1,000,000)) x 1,000,000/b), where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), c = SCR inlet NOx concentration ppmy at 15% O2 for the operating load determined by the most recent source test data, and d = SCR outlet NOx concentration ppmy at 15% O2 from the continuous emission monitor. [District Rule 4102]
- 26. Compliance testing to demonstrate compliance with the PM10, NOx (as NO2), VOC, CO, and ammonia emission limits, and fuel gas sulfur content shall be conducted at least once every twelve months. Compliance testing may be demonstrated when both C-3811-1 and C-3811-2 are operating. NOx emission concentration at the SCR inlet shall be determined for 50%, 75%, 90%, and 100% loads during annual compliance testing by measuring NOx emissions at each load for a minimum of 5 minutes or until NOx concentration has stabilized. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.8(a), 40 CFR 60.335(a) & (c), District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
- 29. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. In lieu of the cylinder gas audit requirements of Appendix F to Part 60, quarterly audits of continuous emission monitors shall be conducted per the procedures and frequencies specified in Appendix B to Part 75, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified 48-hours prior to conducting the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rules 1080 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals. data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit

- 32. The owner or operator shall submit reports of NOx excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) on a semi annual basis. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction, for any 4-consecutive rolling average that exceeds the NOx limit under 40 CFR 60.332(a)(1). For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j). All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each six-month period. [40 CFR 60.334(j); 40 CFR 60.334 (j)(5); District Rule 4703] Federally Enforceable Through Title V Permit
- 33. If the total duration of NOx excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form in §60.7(d) shall be submitted and the excess emission report described in \$60.7(c) need not be submitted unless requested by the EPA or the Air District. [40 CFR. 60.334(i), 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 34. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b), District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [40 CFR 60.334(c), District Rules 2201, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 37. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 38. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
- 39. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a), Fresno County Rules 406, and District Rule 4801] Federally Enforceable Through Title V Permit
- 40. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 41. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703] Federally Enforceable Through Title V Permit
- 43. All records shall be maintained, retained on-site for a minimum of five years and shall be made available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-3811-2-8

**EXPIRATION DATE:** 05/31/2018

#### **EQUIPMENT DESCRIPTION:**

24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-1)

## PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the common exhaust duct from C-3811-1 and C-3811-2. Common exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Gas turbine engine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rules 2201 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 6. The owner or operator shall certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NOx, CO and O2 concentrations. [40 CFR 60.334(c), District Rules 1080 and 4703, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 7. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and 40 CFR 60.334(c), and District Rule 1080] Federally Enforceable Through Title V Permit
- 8. The NOx, CO and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and 40 CFR 60.334(c), District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

- 10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and provisions to sample stack gases at ground level with a portable NOx, CO, and O2 analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and Fresno County Rule 406] Federally Enforceable Through Title V Permit
- 13. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 14. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 15. Number of startups and shutdowns shall not exceed 365 in one calendar year. [District Rules 2201] Federally Enforceable Through Title V Permit
- 16. Each startup or shutdown shall not exceed 30 minutes. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 17. Combined emission rates from units C-3811-1 and C-3811-2 during startup or shutdown shall not exceed: 8.28 lb NOx/hr, 1.42 lb SOx/hr, 3.42 lb PM10/hr, 35.46 lb CO/hr, and 1.28 lb VOC/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 18. Except during startup and shutdown, emission rates from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed any of the following limits: PM10 3.24 lb/hr, SOx (as SO2) 1.42 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 6.16 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 1.28 lb/hr, CO 30 ppmvd @ 15% O2 and 33.2 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. Except during startup and shutdown, emission rates from gas turbine engine C-3811-2 shall not exceed any of the following limits: PM10 1.62 lb/hr, SOx (as SO2) 0.71 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 3.08 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 0.64 lb/hr, CO 30 ppmvd @ 15% O2 and 16.6 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 20. The NOx emission from gas turbine engine at all times during operating hours shall not exceed 112 ppmvd NOx @ 15% O2 over a 4-hour rolling average, including start-up and shutdown periods. The 4-hour rolling average is the arithmetic average of the average NOx concentration measured by the CEMS for a given hour (corrected to 15 percent O2) and the three unit operating hour average NOx concentrations immediately preceding that unit operating hour. [40 CFR 60.332(a)(1) and 60.334(j)(1)(iii)(A)] Federally Enforceable Through Title V Permit
- 21. An hour of excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit in §60.332(a)(1), and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx, CO or O2. [40 CFR 64 and 40 CFR 60.334(j)(1)(iii)] Federally Enforceable Through Title V Permit
- 22. Daily emissions from gas turbine engine C-3811-2 shall not exceed any of the following emission limits, regardless of type of operation: 74.0 lb NOx/day, 17.0 lb SOx/day, 38.9 lb PM10/day, 385.2 lb CO/day, and 15.4 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit

- 23. Combined emission from units C-3811-1 and C-3811-2 shall not exceed any of the following emission limits, regardless of type of operation: 148.0 lb NOx/day, 34.0 lb SOx/day, 77.8 lb PM10/day, 770.0 lb CO/day, and 30.8 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. NOx emissions from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed 20,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bx(c-d)/1,000,000)) x 1,000,000/b), where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), c = SCR inlet NOx concentration ppmv at 15% O2 for the operating load determined by the most recent source test data, and d = SCR outlet NOx concentration ppmv at 15% O2 from the continuous emission monitor. [District Rule 4102]
- 26. Compliance testing to demonstrate compliance with the PM10, NOx (as NO2), VOC, CO, and ammonia emission limits, and fuel gas sulfur content shall be conducted at least once every twelve months. Compliance testing may be demonstrated when both C-3811-1 and C-3811-2 are operating. NOx emission concentration at the SCR inlet shall be determined for 50%, 75%, 90%, and 100% loads during annual compliance testing by measuring NOx emissions at each load for a minimum of 5 minutes or until NOx concentration has stabilized. [District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 28. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.8(a), 40 CFR 60.335(a) & (c), District Rules 1081 and 4703] Federally Enforceable Through Title V Permit
- 29. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 30. In lieu of the cylinder gas audit requirements of Appendix F to Part 60, quarterly audits of continuous emission monitors shall be conducted per the procedures and frequencies specified in Appendix B to Part 75, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified 48-hours prior to conducting the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rules 1080 and 4703, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [District Rule 1080] Federally Enforceable Through Title V Permit

- 32. The owner or operator shall submit reports of NOx excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) on a semi annual basis. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction, for any 4-consecutive rolling average that exceeds the NOx limit under 40 CFR 60.332(a)(1). For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j). All reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each six-month period. [40 CFR 60.334(j); 40 CFR 60.334 (j)(5); District Rule 4703] Federally Enforceable Through Title V Permit
- 33. If the total duration of NOx excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form in §60.7(d) shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the EPA or the Air District. [40 CFR. 60.334(j), 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 34. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b), District Rule 1080, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [40 CFR 60.334(c), District Rules 2201, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. The permittee shall maintain a daily stationary gas turbine system operating log that includes the actual local startup and stop time, length and reason for reduced load periods, total hours of operation and the type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 37. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 38. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
- 39. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a), Fresno County Rules 406, and District Rule 4801] Federally Enforceable Through Title V Permit
- 40. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 41. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 42. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703] Federally Enforceable Through Title V Permit
- 43. All records shall be maintained, retained on-site for a minimum of five years and shall be made available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

# **ATTACHMENT B**

Previous Title V Operating Permit





# Permit to Operate

FACILITY: C-3811

**EXPIRATION DATE: 05/31/2013** 

**LEGAL OWNER OR OPERATOR:** 

MAILING ADDRESS:

CAL PEAK POWER - PANOCHE, LLC ATTN: CALPEAK ACCOUNTING DEPT.

7365 MISSION GORGE RD, BLDG B, SUITE C

SAN DIEGO, CA 92120-1274

**FACILITY LOCATION:** 

43699 WEST PANOCHE RD FIREBAUGH, CA 93622-9720

**FACILITY DESCRIPTION:** 

POWER GENERATION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

# San Joaquin Valley Air Pollution Control District

**FACILITY:** C-3811-0-1 **EXPIRATION DATE:** 05/31/2013

### **FACILITY-WIDE REQUIREMENTS**

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0 and Fresno County Rule 110] Federally Enforceable Through Title V Permit
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/19/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.12.1] Federally Enforceable Through Title V Permit
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (2/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE. These terms and conditions are part of the Facility-wide Permit to Operate.

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- 23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials for architectural coatings subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
- 30. Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
- 31. An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
- 32. Whenever open areas are disturbed or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
- 33. Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit
- 34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (8/19/04) or Rule 8011 (8/19/04). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
- 35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

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- 36. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Fresno County Rule 110. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (8/19/04); 8031 (8/19/04); 8041 (8/19/04); 8051 (8/19/04); 8061 (8/19/04); and 8071 (9/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin April 30 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit
- 42. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 43. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR 68]
- 44. On April 30, 2004, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin June 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

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## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3811-1-7

**EXPIRATION DATE:** 05/31/2013

#### **EQUIPMENT DESCRIPTION:**

24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-2)

### PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the common exhaust duct from C-3811-1 and C-3811-2. Common exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- Gas turbine engine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rule 2201, District Rule 4703, 6.2.6, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- The owner or operator shall certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
- The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
- The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

Facility Name: CAL PEAK POWER - PANOCHE, LLC 43699 WEST PANOCHE RD, FIREBAUGH, CA 93622-9720 Location:

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- 10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and provisions to sample stack gases at ground level with a portable NOx, CO, and O2 analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and Fresno County Rule 406] Federally Enforceable Through Title V Permit
- 13. The transitional period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
- 14. Number of startups and shutdowns shall not exceed 365 in one calendar year. [District Rules 2201] Federally Enforceable Through Title V Permit
- 15. Each startup or shutdown shall not exceed 30 minutes. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 16. Combined emission rates from units C-3811-1 and C-3811-2 during startup or shutdown shall not exceed: 8.28 lb NOx/hr, 1.42 lb SOx/hr, 3.42 lb PM10/hr, 35.46 lb CO/hr, and 1.28 lb VOC/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Except during startup and shutdown, emission rates from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed any of the following limits: PM10 3.24 lb/hr, SOx (as SO2) 1.42 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 6.16 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 1.28 lb/hr, CO 30 ppmvd @ 15% O2 and 33.2 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [40 CFR 60.332, District Rules 2201, and District Rule 4703, 5.1 and 5.2] Federally Enforceable Through Title V Permit
- 18. Except during startup and shutdown, emission rates from gas turbine engine C-3811-1 shall not exceed any of the following limits: PM10 1.62 lb/hr, SOx (as SO2) 0.71 lb/hr, NOx (as NO2) 3.4 ppmvd @ 15% O2 and 3.08 lb/hr, VOC (as methane) 2.0 ppmvd @ 15% O2 and 0.64 lb/hr, CO 30 ppmvd @ 15% O2 and 16.6 lb/hr, or ammonia 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [40 CFR 60.332, District Rules 2201, and District Rule 4703, 5.1 and 5.2] Federally Enforceable Through Title V Permit
- 19. Daily emissions from gas turbine engine C-3811-1 shall not exceed any of the following emission limits, regardless of type of operation: 74.0 lb NOx/day, 17.0 lb SOx/day, 38.9 lb PM10/day, 385.2 lb CO/day, and 15.4 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Combined emission from units C-3811-1 and C-3811-2 shall not exceed any of the following emission limits, regardless of type of operation: 148.0 lb NOx/day, 34.0 lb SOx/day, 77.8 lb PM10/day, 770.0 lb CO/day, and 30.8 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. NOx emissions from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed 20,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bx(c-d)/1,000,000)) x 1,000,000/b), where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), c = SCR inlet NOx concentration ppmv at 15% O2 for the operating load determined by the most recent source test data, and d = SCR outlet NOx concentration ppmv at 15% O2 from the continuous emission monitor. [District Rule 4102]

- 23. Compliance testing to demonstrate compliance with the PM10, NOx (as NO2), VOC, CO, and ammonia emission limits, and fuel gas sulfur content shall be conducted at least once every twelve months. Compliance testing may be demonstrated when both C-3811-1 and C-3811-2 are operating, NOx emission concentration at the SCR inlet shall be determined for 50%, 75%, 90%, and 100% loads during annual compliance testing by measuring NOx emissions at each load for a minimum of 5 minutes or until NOx concentration has stabilized. [District Rule 1081 and District Rule 4703, 6.3.1] Federally Enforceable Through Title V Permit
- 24. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.8(a), 40 CFR 60.335(c)(3), District Rule 1081, and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
- 26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. In lieu of the cylinder gas audit requirements of Appendix F to Part 60, quarterly audits of continuous emission monitors shall be conducted per the procedures and frequencies specified in Appendix B to Part 75, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified 48-hours prior to conducting the audits. Audit reports shall be submitted along with quarterly compliance reports to the District Rule 1080, District Rule 4703, 6.2.3, 40 CFR 60.334(iii) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.01 Federally Enforceable Through Title V Permit
- 29. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
- 30. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [40 CFR 60.334(a), District Rule 2201, District Rule 4703, 6.2.6, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93), [District Rule 1081] Federally Enforceable Through Title V Permit

Location: 43699 WEST C-3811-1-7 : Feb 5 2014 4:58PM - BRARG 43699 WEST PANOCHE RD, FIREBAUGH, CA 93622-9720

- 33. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a), Fresno County Rules 406, and District Rule 4801] Federally Enforceable Through Title V Permit
- 34. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 35. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 36. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
- 37. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 38. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 39. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 40. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 41. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 42. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
- 43. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 44. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 45. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 46. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR 72] Federally Enforceable Through Title V Permit
- 47. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit

- 48. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 49. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 50. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 51. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 52. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3811-2-7 **EXPIRATION DATE:** 05/31/2013

#### **EQUIPMENT DESCRIPTION:**

24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-1)

### PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the common exhaust duct from C-3811-1 and C-3811-2. Common exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Gas turbine engine and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Gas turbine engine shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rule 2201, District Rule 4703, 6.2.6, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 6. The owner or operator shall certify, maintain, operate, and quality-assure a system which continuously measures and records the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
- 7. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
- 8. The NOx and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specification 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
- 9. The facility shall install and maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit

Facility Name: CAL PEAK POWER - PANOCHE, LLC Location: 43699 WEST PANOCHE RD, FIREBAUGH, CA 93622-9720 C-3811-2-7: Feb 5 2014 4:58PM - BRARG

- 10. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 11. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and provisions to sample stack gases at ground level with a portable NOx, CO, and O2 analyzer. [District Rule 1081] Federally Enforceable Through Title V Permit
- 12. This unit shall be fired exclusively on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.333(b) and Fresno County Rule 406] Federally Enforceable Through Title V Permit
- 13. The transitional period shall be defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703, 5.3.1.1] Federally Enforceable Through Title V Permit
- 14. Number of startups and shutdowns shall not exceed 365 in one calendar year. [District Rules 2201] Federally Enforceable Through Title V Permit
- 15. Each startup or shutdown shall not exceed 30 minutes. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 16. Combined emission rates from units C-3811-1 and C-3811-2 during startup or shutdown shall not exceed: 8.28 lb NOx/hr, 1.42 lb SOx/hr, 3.42 lb PM10/hr, 35.46 lb CO/hr, and 1.28 lb VOC/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Except during startup and shutdown, emission rates from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed any of the following limits: PM10 - 3.24 lb/hr, SOx (as SO2) - 1.42 lb/hr, NOx (as NO2) - 3.4 ppmvd @ 15% O2 and 6.16 lb/hr, VOC (as methane) - 2.0 ppmvd @ 15% O2 and 1.28 lb/hr, CO - 30 ppmvd @ 15% O2 and 33.2 lb/hr, or ammonia - 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [40 CFR 60.332, District Rules 2201, and District Rule 4703, 5.1 and 5.2] Federally Enforceable Through Title V Permit
- 18. Except during startup and shutdown, emission rates from gas turbine engine C-3811-1 shall not exceed any of the following limits: PM10 - 1.62 lb/hr, SOx (as SO2) - 0.71 lb/hr, NOx (as NO2) - 3.4 ppmvd @ 15% O2 and 3.08 lb/hr, VOC (as methane) - 2.0 ppmvd @ 15% O2 and 0.64 lb/hr, CO - 30 ppmvd @ 15% O2 and 16.6 lb/hr, or ammonia - 10 ppmvd @ 15% O2. All emission limits are three hour rolling averages. [40 CFR 60.332, District Rules 2201, and District Rule 4703, 5.1 and 5.2] Federally Enforceable Through Title V Permit
- 19. Daily emissions from gas turbine engine C-3811-2 shall not exceed any of the following emission limits, regardless of type of operation: 74.0 lb NOx/day, 17.0 lb SOx/day, 38.9 lb PM10/day, 385.2 lb CO/day, and 15.4 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. Combined emission from units C-3811-1 and C-3811-2 shall not exceed any of the following emission limits, regardless of type of operation: 148.0 lb NOx/day, 34.0 lb SOx/day, 77.8 lb PM10/day, 770.4 lb CO/day, and 30.8 lb VOC/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. NOx emissions from gas turbine engines C-3811-1 and C-3811-2 combined, shall not exceed 20,000 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bx(c-d)/1,000,000)) x 1,000,000/b), where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), c = SCR inlet NOx concentration ppmv at 15% O2 for the operating load determined by the most recent source test data, and d = SCR outlet NOx concentration ppmv at 15% O2 from the continuous emission monitor. [District Rule 4102]

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- 23. Compliance testing to demonstrate compliance with the PM10, NOx (as NO2), VOC, CO, and ammonia emission limits, and fuel gas sulfur content shall be conducted at least once every twelve months. Compliance testing may be demonstrated when both C-3811-1 and C-3811-2 are operating. NOx emission concentration at the SCR inlet shall be determined for 50%, 75%, 90%, and 100% loads during annual compliance testing by measuring NOx emissions at each load for a minimum of 5 minutes or until NOx concentration has stabilized. [District Rule 1081 and District Rule 4703, 6.3.1] Federally Enforceable Through Title V Permit
- 24. Compliance demonstration (source testing) shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used PM10: EPA method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.8(a), 40 CFR 60.335(c)(3), District Rule 1081, and District Rule 4703, 6.4] Federally Enforceable Through Title V Permit
- 26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080, 7.2 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 27. In lieu of the cylinder gas audit requirements of Appendix F to Part 60, quarterly audits of continuous emission monitors shall be conducted per the procedures and frequencies specified in Appendix B to Part 75, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified 48-hours prior to conducting the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080, District Rule 4703, 6.2.3, 40 CFR 60.334(iii) and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 28. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5) and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
- 30. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [40 CFR 60.334(a), District Rule 2201, District Rule 4703, 6.2.6, and 40 CFR Part 64] Federally Enforceable Through Title V Permit
- 31. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit

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- 33. Sulfur compound emissions shall not exceed 0.015% by volume, 150 ppmy, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a), Fresno County Rules 406, and District Rule 4801] Federally Enforceable Through Title V Permit
- 34. The sulfur content of each fuel source shall be documented in a valid purchase contract, a supplier certification, a tariff sheet, or a transportation contract. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 35. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b) and 40 CFR Part 641 Federally Enforceable Through Title V Permit
- 36. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
- 37. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 38. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 39. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 40. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 41. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 42. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72, 40 CFR 75] Federally Enforceable Through Title V Permit
- 43. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 44. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 45. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 46. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 47. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit

- 48. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 49. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 50. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 51. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 52. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

## ATTACHMENT C

**Detailed Facility List** 

**SJVUAPCD** CENTRAL

Detailed Facility Report
For Facility=3811 and excluding Deleted Permits
Sorted by Facility Name and Permit Number

2/5/14 5:02 pm

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CAL PEAK POWER - PANOCHE, LLC		FAC# C 3811	TYPE: TitleV	EXPIRE ON: 05/31/2013				
43699 WEST PANOCHE RD		STATUS: A	TOXIC ID:	AREA: 3/				
FIREBAUGH, CA 93622-9720		TELEPHONE: 6192293770		INSP. DATE: 04/14				

FIREBAUGH, CA 93622-9720 TELEPHONE: 6192293770					INSP. DATE: 04/14		
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
C-3811-1-7	24.7 MW	3020-08A F	1	8,171.00	8,171.00	Α	24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-2)
C-3811-2-7	24.7 MW	3020-08A F	1	8,171.00	8,171.00	Α	24.7 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF PRATT & WHITNEY MODEL FT-8 NATURAL GAS-FIRED GAS TURBINE ENGINE WITH DRY LOW NOX (DLN) COMBUSTORS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST WITH A 49.5 MW GENERATOR (SHARED WITH C-3811-1)

Number of Facilities Reported: 1

## ATTACHMENT D

Facility Comments / District Responses

## District's Response to the Comments from the Facility

(C-3811-1-8 and -2-8)

A. Title Page (page 2): The Evaluation lists Jeff Paul as the contact person.

**Comment:** Jeff Paul is no longer the facility contact. The facility contact should be revised to state Ramiro Gonzalez, Plant Manager, (619) 229-3770, Ext 303.

**Response:** The facility contact person has been changed to Ramiro Gonzalez, Plant Manager.

B. Title Page (page 2): The Evaluation lists Jeff Paul as the Responsible Official.

**Comment:** Jeff Paul is no longer the Responsible Official for the facility. The Responsible Official should be revised to state JJ Fair Jr., General Manager, CalPeak Power, LLC.

**Response:** The Responsible Official has been changed to JJ Fair Jr., General Manager.

C. Section F, 40 CFR Part 60, Subpart GG. Standard of Performance for Stationary Gas Turbines (pages 7 to 9): The Evaluation states that the nitrogen oxides (NOx) emission limit imposed by District Rule 4703 is more stringent than the NOx emission limit imposed by 40 CFR Part 60.332(a)(1), and therefore compliance with the emission limit imposed by 40 CFR 60.332(a)(1) is met by complying with the proposed permit emission limit. Comment 1: Each emission limit is based on a different averaging period and considers different modes of operation to calculate the emissions for each hour of operation. Therefore, it could be possible to exceed the NSPS Subpart GG NOx standard, while maintaining compliance with the District imposed permit limit since the latter does not include startup/shutdown emissions. The following table includes a comparison of the differences between the two emission limits.

Regulation/Rule	Limit	Averaging Period	Exceptions
District Rule Proposed Requirement	3.4 ppmv@15% 02	3-hr rolling average	The limit excludes emissions during startups and shutdowns. Emissions during a startup or shutdown hour are excluded from the 3-hour rolling average calculation. The calculation restarts after each shutdown/startup sequence and is only compared to the limit when three hours of continuous operations occur.
Subpart GG [40 CFR Part 60.332(a)(1 )]	75 ppmv@15% 02	4-consecutive operating hour rolling average	It is our understanding that this limit applies at all time, including emissions during startups. shutdowns and malfunctions. The rolling average is recalculated each operating hour and is an arithmetic average of hourly emissions for the current hour and the three unit operating hours preceding the current hour. The calculation never resets and continues to roll each hour the unit is in operation.

We recommend adding the limit imposed by 40 CFR Part 60.332(a)(1) to the table on page 8 of the Evaluation as an applicable NOx emission limit under the Proposed Requirement column. In addition, we recommend adding this limit to Permits to Operate C-3811-1 and C-3811-2, including the numerical standard, and a description of the averaging period and the criteria that defines an excess emission (see 40 CFR 60.3340)(1)(iii)(A)).

Comment 2: We have data that suggests the 75 ppmv@15% 02 limit calculated for Cal Peak may be too low. Guaranteed performance and emissions data provided by the manufacturer for an FT8-2 Twin Pac reports the manufacturers rated heat rate as 9142 Btu/kWh. Using this value in the equation listed in 40 CFR 60.332(a)(1), the NOx Standard would be 112 ppmvd@15% 02. As such, we recommend a revision to the Evaluation to reflect an emission standard calculated using design heat rate data provided by the manufacturer, as agreed upon between CalPeak Power-Panoche, LLC and the District. This emission standard would then be listed in the Permit to Operate, as suggested in Comment 1 above.

Response to Comment 1 & 2: The table with NSPS Subpart GG compliance discussion has been revised to remove the comparison between NSPS Subpart GG and District Rule 4703 emission limits. Conditon #20 and 21 have been added to the proposed permits C-3811-1-8 and C-3811-2-8 with a NOx emission limit of 112 ppmvd @15% over a 4-hour rolling average to comply with Subpart GG section 60.332(a)(1) requirements including startup and shutdown periods, and also defines the averaging period and hour of excess emissions.

D. Section F, 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines (page 8): In the Monitoring section of the side-by-side comparison table on page 8, the Evaluation cites 40 CFR 60.334(a) and (b) as applicable requirements.

**Comment:** The gas turbine at the facility is not designed with water injection or steam injection to control NOx emissions, therefore, 40 CFR 60.334(a) and (b) do not apply. We recommend a revision to the table to remove these citations as applicable requirements. If the District intends to require the facility to use a CEMS for the purpose of determining excess emissions of NOx above the NSPS Subpart GG limit. the table should reference 40 CFR 60.334(c) as an applicable requirement instead.

<u>Response</u>: The table with NSPS Subpart GG compliance discussion has been revised to remove the reference to section 40 CFR 60.334(a) and (b) and has been replaced with section 40 CFR 60.334(c).

E. Section F, 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines (pages 9): In the Reporting section for Subpart GG in the side-by-side comparison table, the Evaluation cites 40 CFR 60.3340)(5) as an applicable requirement and states reports required under §60.7(c) shall be post marked by the 30th day following the end of each calendar guarter.

**Comment** 1: 40 CFR 60.3340)(5) reads as follows, "All reports required under §60.7(c) shall be postmarked by the 30th day following the. end of each 6-month period." We recommend a revision to the table to change calendar quarter to 6-month period, consistent with the regulation.

**Response:** The table with NSPS Subpart GG compliance discussion has been revised to change from calendar quarter to 6-month period as per section 40 CFR 60.3340)(5).

**Comment** 2: The excess emissions and monitor downtime report required by 40 CFR 60.3340) is based on four-hour rolling averages and not three-hour rolling averages (permit limit). In addition, the reporting period for this Subpart GG report is semi-annual and not quarterly. Lastly, this Subpart GG report does not include or address CO emissions, only NOx emissions. Therefore, we request that the NSPS Subpart GG excess emission and monitor downtime report required by 40 CFR 60.3340(j) be addressed in two new, separate permit conditions, as follows:

Example Condition #1: The owner or operator shall submit written reports of NOx excess emissions and monitor downtime in accordance with §60.7(c) to the District and the EPA on a semi-annual basis. All reports shall be postmarked by the 30th day following the end of each six-month period. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction, for any 4-consecutive rolling average that exceeds the Subpart GG limit. [40 CFR 60.334(j), 40 CFR 60.4(a)]

Example Condition #2: If the total duration of NOx excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CEMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form in §60.7(d) shall be submitted and the excess emission report described in §60.7(c) need not be submitted. [40 CFR. 60.334(j), 40 CFR 60.7(c) and (d)]

Response: The proposed conditions have been placed on the permit C-3811-1-8 and C-3811-2-8 as condition #32 and 33 to comply with required by 40 CFR 60.3340(j).

F. Section F, 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines (pages 9): The last paragraph in the Proposed Requirement column of the Reporting section of the side-by-side comparison table, the Evaluation states, "Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit...."

**Comment:** This statement implies that all excess emissions are 4-hour rolling averages. The District limit is based on a 3-hour rolling average. We recommend a revision to the table to clarify that this definition only applies to the NSPS subpart GG limit. In addition, the averaging period should be revised to state 4-consecutive operating hour rolling average to clarify that the emission calculation does not reset at each startup/shutdown.

**Response:** The table with NSPS Subpart GG compliance discussion has been revised that excess emissions are based on 4-hour rolling averages including startup/shutdown.

G. Section F, 40 CFR Part 60, Subpart GG, Standard of Performance for Stationary Gas Turbines (pages 9): The first paragraph preceding the side-by-side comparison table states that the District Rule 4703 requirement to limit NOx concentration to 5 ppmv@15% O2 is clearly more stringent than the Subpart GG emissions limit of 75 ppmv@15% O2.

**Comment:** As stated in Comment C above, the NOx emission limits are based on different averaging periods and consider different modes of operation to calculate the emissions for each hour of operation. Therefore, it could be possible to exceed the NOx standard imposed by NSPS Subpart GG, while maintaining compliance with the limit imposed by District rules since the latter does not include emissions during startup/shutdown periods. We recommend a revision to this paragraph to address the differences between these limits.

**Response**: This paragraph has been removed from the final evaluation.

H. Section G, 40 CFR Part 64, Compliance Assurance Monitoring (page 10): In paragraph two of this section, the Evaluation states, "There are no effective stack controls utilized for PM10 or SOx, and the precontrolled emissions are below the major source thresholds for CO and VOC; therefore, per items #2 and #3 above, CAM is not triggered for these emissions."

**Comment:** We have data that suggests the pre-controlled emissions for CO may be estimated above the major source threshold. We recommend the District work with CalPeak to re-evaluate pre-controlled emissions for CO to confirm that pre-controlled emissions fall below the major source threshold of 100 tons/year. If pre-controlled emissions for CO are in fact above the major source threshold for CO, to qualify for the exemption listed in 40 CFR 64.2(b)(vi), the District would need to add a permit condition to require the use of a CEMS for CO.

**Response:** The pre-controlled CO emissions calculation in the EE shows that uncontrolled CO emissions are above major source threshold and CAM is triggered. The conditions on the proposed permits have been revised to include CEMS for CO to satify CAM and qualify for exemption.

I. Section G, 40 CFR Part 64, Compliance Assurance Monitoring (page 10): In paragraph four of this section, the Evaluation states, "The gas turbine is equipped with a CEM systems for NOx emissions, CO emissions, and 02 concentrations satisfying Appendix P of 40 CFR Part 51, 40 CFR 60.13, 40 CFR Part 75, and Appendix B of 40 CFR Part 60 and therefore, compliance with the requirements of 40 CFR Part 64, Compliance Assurance Monitoring."

**Comment:** Based on a review of the current and proposed Permits to Operate, C-3811-1 and C-3811-2, there are no requirements listed in any of the PTO's to operate a CEMS for CO emissions. We recommend a revision to this paragraph to remove reference to CEMS for CO. This comment will not apply if the evaluation suggested in Comment H above reveals that CAM is triggered for CO emissions.

<u>Response</u>: As discussed above CAM is triggered for CO. The conditions on the proposed permits have been revised to include CEMS for CO to satisfy CAM and qualify for exemption.

J. Condition 23: In the Title V Permit Renewal Application submitted to the District on November 26, 2012, we requested a change to the compliance testing frequency from "at least once every 12-months" to "at least once every four QA operating quarters as defined in Part 75, not to exceed eight calendar quarters."

**Comment:** The District did not implement this request, nor did they address the request in the Evaluation. We request the District implement this request. See the Permit Application for more information.

<u>Response</u>: The change cannot be granted as it is a District Rule 4703 compliance testing requirement to provide source test information annually regarding the exhaust gas NOx and CO concentrations.