



APR 2 1 2014

Mr. Kelly S. Lucas Sunrise Power Company P.O. Box 81617 Bakersfield, CA 93380-1617

Re: Notice of Preliminary Decision – Title V Permit Renewal District Facility # S-3746 Project # S-1124492

Dear Mr. Lucas:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Sunrise Power Company at 12857 Sunrise Power Road, Fellows, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

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.

Arnaud Marjollet 🛛 🛿 🖡 V Director of Permit Services

Enclosures

cc: Mike Tollstrup, CARB (w/enclosure) via email cc: Gerardo C. Rios, EPA (w/enclosure) via email

> Seyed Sadredin Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061 Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

## SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

#### Proposed Title V Permit Renewal Evaluation Sunrise Power Company S-3746

### TABLE OF CONTENTS

Ι.	PROPOSAL	1
11.	FACILITY LOCATION	1
III.	EQUIPMENT LISTING	1
IV.	GENERAL PERMIT TEMPLATE USAGE	2
V.	SCOPE OF EPA AND PUBLIC REVIEW	2
VI.	FEDERALLY ENFORCEABLE REQUIREMENTS	2
VII.	REQUIREMENTS NOT FEDERALLY ENFORCEABLE	5
VIII.	PERMIT REQUIREMENTS	6
IX.	PERMIT SHIELD	14
Х.	PERMIT CONDITIONS	15
XI.	ATTACHMENTS	15
A. B.	Draft Renewed Title V Operating Permit Previous Title V Operating Permit	

C. Detailed Facility List

# TITLE V PERMIT RENEWAL EVALUATION Power Plant

**Engineer:** Gurpreet Brar **Date:** April 9, 2014

Facility Number: Facility Name: Mailing Address:	S-3746 Sunrise Power Company P.O. Box 81617 Bakersfield, CA 93380-1617
Contact Name:	Kelly S. Lucas
Phone:	(661) 615-4630
Responsible Official:	Kelly S. Lucas
Title:	Executive Director
Project #:	S-1124492
Deemed Complete:	January 4, 2013

#### I. PROPOSAL

Sunrise Power Company was issued a renewed Title V permit on November 10, 2009. 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

Sunrise Power Company is located at 12857 Sunrise Power Road in Fellows, CA.

SW ¼ Sec 23, T31S, R22E – MDB&M

#### 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 does not propose to use any model general permit templates.

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

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

#### VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### A. Rules Updated

- District Rule 2020, <u>Exemptions</u> (amended December 19, 2002 ⇒ amended August 18, 2011)
- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (amended December 19, 2005 ⇒ amended April 21, 2011)
- District Rule 4702, <u>Internal Combustion Engines Phase 2</u> (amended January 18, 2007 - SIP approved ⇒ amended November 14, 2013 - not SIP approved)
- 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 recent renewal of the Title V permit.

- 40 CFR 60 Subpart IIII <u>Standards of Performance for Stationary Compression</u> Ignition Internal Combustion Engines
- 40 CFR 63 Subpart YYYY <u>National Emission Standards for Hazardous Air</u> <u>Pollutants for Stationary Combustion Turbines</u>
- 40 CFR 63, Subpart ZZZZ <u>National Emissions Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u>

#### D. Rules Not Updated

- District Rule 1070, <u>Inspections</u> (amended December 17,1992)
- District Rule 1080, <u>Stack Monitoring (amended December 17,1992)</u>
- District Rule 1081, <u>Source Sampling</u> (amended December 16,1993)
- District Rule 1100, <u>Equipment Breakdown</u> (amended December 17,1992)
- District Rule 1160, <u>Emission Statements</u> (adopted November 18, 1992)
- District Rule 2010, <u>Permits Required</u> (amended December 17, 1992)
- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2040, <u>Applications</u> (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (amended December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001)

- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- 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 4701, <u>Internal Combustion Engines Phase 1</u> (amended August 21, 2003)
- District Rule 4301, Fuel Burning Equipment (amended December 17, 1992)
- District Rule 4601, <u>Architectural Coatings</u> (amended October 31, 2001)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007) -
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- District Rule 8011, <u>General Requirements</u> (amended August 19, 2004)
- District Rule 8021, <u>Construction, Demolition, Excavation, Extraction, and</u> <u>Other Earthmoving Activities</u> (amended August 19, 2004)
- District Rule 8031, <u>Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041, <u>Carryout and Trackout</u> (amended August 19, 2004)
- District Rule 8051, Open Areas (amended August 19, 2004)
- District Rule 8061, <u>Paved and Unpaved Roads</u> (amended August 19, 2004)
- District Rule 8071, <u>Unpaved Vehicle/Equipment Traffic Areas</u> (amended September 16, 2004)
- 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</u> <u>Combustion Turbines</u>
- 40 CFR Part 64, <u>Compliance Assurance Monitoring (CAM)</u>
- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos
- 40 CFR Part 72, Permits Regulation
- 40 CFR Part 73, <u>Sulfur Dioxide Allowance System</u>
- 40 CFR Part 75, <u>Continuous Emission Monitoring</u>
- 40 CFR Part 77, Excess Emissions
- 40 CFR Part 82, Subparts B and F, <u>Stratospheric Ozone</u>

#### 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, <u>Nuisance</u> (as amended December 17, 1992)

Condition 41 of permit unit -0-3 is based on District Rule 4102 and will therefore not be discussed any further.

• District Rule 7012, <u>Hexavalent Chromium - Cooling Towers</u> (as amended December 17, 1992)

Condition 1 of permit unit -3-3 is based on District Rule 7012 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 previous Title V permit or unamended rules for which the original permit conditions have been revised.

#### A. District Rule 2020 - Exemptions

District Rule 2020 lists equipment which is 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:

- 1) 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 – <u>Prevention of Significant Deterioration</u>

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. District Rule 4702 - Internal Combustion Engines – Phase 2

The following discussion addresses both SIP and Non SIP versions of this rule.

The purpose of this rule is to limit the emissions of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SOx) from internal combustion engines.

This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.

All of the District Rule 4702 requirements on the existing permits have been removed and updated in accordance with the latest rule amendments and have been included as discussed below.

Section 3.26 defines a "Low-use Engine" as: an internal combustion engine that is limited by a permit condition to be operated no more than 200 hours per calendar year and the engine is not used to perform any of the functions specified in Section 3.26.1 through Section 3.26.3.

- 3.26.1 Generate electrical power that is either fed into the electrical utility power grid or used to reduce electrical power purchased by a stationary source;
- 3.26.2 Generate mechanical power that is used to reduce electrical power purchased by a stationary source; or
- 3.26.3 Is used in a distributed generation application.

The IC engine under permit unit S S-3746-4 meet the definition of 'low use' engine and will only have to meet the requirements of Sections 5.9 and 6.2.3 of this Rule.

Section 5.9.1 requires that the owner of an engine subject to the requirements of Section 5.2 or 4.2 shall comply with the requirements specified in Sections 5.9.2 through 5.9.5:

Section 5.9.2 requires the owner to properly operate and maintain each engine as recommended by the engine manufacturer or emission control system supplier.

Section 5.9.3 requires the owner to monitor the operational characteristics of each engine as recommended by the engine manufacturer or emission control system supplier.

Section 5.9.4 requires each engine to install and operate a nonresettable elapsed operating time meter. In lieu of installing a nonresettable time meter, the owner of an engine may use an alternative device, method, or technique, in determining operating time provided that the alternative is approved by the APCO and is allowed by Permit-to-Operate or Stationary Equipment Registration condition. The owner of the engine shall properly maintain and operate the time meter or alternative device in accordance with the manufacturer's instructions. Section 5.9.5 applies to the AO spark-ignited engine that has been retro-fitted with a NOx exhaust control. Since the three engines at this facility are not spark ignited, this section is not applicable.

Section 6.2.3 requires that an owner claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and submitted to the APCO upon request and at the end of each calendar year in a manner and form approved by the APCO.

All the above requirements are the same for both SIP and non-SIP versions of the rule. Thus the non-SIP requirements are as stringent as the SIP approved rule requirements.

Conditions 7 to 10 and 15 to 17 on the draft PTO (S-3746-4-2) assure compliance with the revised requirements of this rule.

#### F. 40 CFR 63 Subpart YYYY - <u>National Emission Standards for Hazardous</u> <u>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.

#### G. 40 CFR 63, Subpart ZZZZ - <u>National Emissions Standards for Hazardous Air</u> <u>Pollutants for Stationary Reciprocating Internal Combustion Engines</u>

This subpart is applicable to stationary internal combustion engines that are located at major or area sources of HAP emissions, except if the stationary IC engine is being tested at a stationary IC engine test cell/stand.

a. Transportable Tier-3 Certified Diesel-Fired Ic Engine Up To 532 Hp Powering An Electrical Generator (S-3746-4-2)

The requirements of 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, are applicable to owners and operators of a stationary RICE located at a major or area source of HAP emissions. This facility is not a major source of HAP emissions and is therefore, by definition, and area source of HAP emissions.

The subject engine was installed after June 12, 2006; therefore, as defined by Section 63.6590(iii), this engine can be classified as new stationary RICE located at an area source.

Per Section 63.6590(c), the subject engine must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines. No further requirements apply for this engine under Subpart ZZZZ.

#### H. 40 CFR 60, Subpart IIII – <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u>

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. 40 CFR Part 60, Subpart IIII is the only subpart that applies to compression-ignited internal combustion engines.

Section 60.4200(a)(2)(i) states that the provisions of this subpart apply to owners and operators of stationary compression ignition (CI) internal combustion engines that commence construction after July 11, 2005 where the engines are manufactured after April 1, 2006 and are not fire pump engines. The engine in this project was manufactured in 2008 and is not a fire pump engine. Therefore, this subpart applies to the proposed engine.

Sections 60.4201 through 60.4203 apply to engine manufacturers. Therefore, these sections will not be discussed unless they are referenced later by another section of this subpart.

Section 60.4204(b) states that owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in Section 60.4201. Section 60.4201 states that engine manufacturers must certify their 2007 model year and later non-emergency stationary CI engines to the applicable certification emission standards based on the engine size and number of liters per cylinder. This engine is certified to the latest EPA Tier certification level (Tier 3) for the applicable horsepower range, guaranteeing compliance with the emission standards of Subpart IIII.

Section 60.4205 lists emission standards for owners or operators of emergency CI engines. This engine is not used for emergency operation. Therefore, this section does not apply.

Section 60.4206 states that owners or operators of CI engines must meet the applicable emission standards for the entire life of said engines. The Tier 3 certified emissions for the proposed engine will be listed on the permit as emission factors, ensuring that the emission standards are met over the entire life of this engine.

Section 60.4207(b) states that beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. Section 80.510(b) states that beginning June 1, 2010, except as otherwise specifically provided in this subpart, the sulfur content for all non-road diesel fuel shall not exceed 15 ppm. The engine uses CARB certified diesel fuel, which meets all of the fuel requirements listed in Subpart IIII.

Section 60.4208 lists deadline dates for importing or installing stationary CI engines produced in the previous model year. None of the deadline dates affect the engine proposed in this project. Therefore, this section does not apply.

Section 60.4209 applies to emergency stationary CI engines and stationary CI engines equipped with a diesel particulate filter. The proposed engine in this project does not fall under these two categories. Therefore, this section does not apply.

Section 60.4210 applies only to engine manufacturers. Therefore, this section will not be discussed unless it is referenced later by another section of this subpart.

Section 60.4211(a) states that owners or operators who comply with the emission standards specified in this subpart must operate and maintain the stationary CI engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.

Section 60.4211(b) applies to pre-2007 model year engines. Therefore, this section does not apply.

Section 60.4211(c) states that if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Section 60.4204(b) or Section 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in Section 60.4205(c), you must comply by purchasing an engine certified to the emission standards in Section 60.4204(b), or Section 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

The engine must be installed and configured according to the manufacturer's specifications. The proposed Tier 3 certified engine complies with the emission standards in Section 60.4204(b) and will be installed according to the manufacturer's specifications. Therefore, this section is satisfied.

Section 60.4211(d) applies to owners or operators who must comply with the emission standards specified in Section 60.4204(c) or Section 60.4205(d). The proposed engine is not subject to the emission standards specified in Sections 60.4204(c) or 60.205(d). Therefore, this section does not apply.

Section 60.4211(e) applies to owners or operators of emergency stationary CI engines. Therefore, this section does not apply.

Section 60.4212 applies to owners or operators of a stationary CI engine with a displacement of less than 30 liters per cylinder and required to conduct performance tests pursuant to Section 60.4211(b). Section 60.4211(b) does not apply to these engines. Therefore, performance tests are not required and this section does not apply.

Section 60.4213 applies to owners or operators of CI engines with a displacement of greater than or equal to 30 liters per cylinder. Per the CARB/EPA emissions data sheet, the displacement for the engine is 15.7 litres per cylinder which is less than 30 liters per cylinder. Therefore, this section does not apply.

Section 60.4214(a) states owners and operators of non-emergency stationary Cl engines that are greater than 3,000 hp, or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 175 bhp and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section. The proposed engine is a post-2007 model year non-emergency engines rated less than 3,000 hp. Per the CARB/EPA executive order for the proposed engine, the displacement is less than 10 liters per cylinder. Therefore, this section does not apply.

Section 60.4214(b) applies to emergency stationary CI engines. Therefore, this section does not apply.

Section 60.4214(c) applies to stationary CI engines equipped with a diesel particulate filter. Therefore, this section does not apply.

Sections 60.4215 and 60.4216 apply to engines operated outside the continental United States. Therefore, these sections do not apply.

Section 60.4217 applies to engines that do not use diesel fuel. Therefore, this section does not apply.

Conditions 7 and 11 to 15 on the draft PTO (S-3746-4-2) assure compliance with the requirements of this rule.

#### I. 40 CFR Part 64-CAM

#### §64.2 – Applicability

This section 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>S-3746-1-9 & -2-9:</u>

 This unit contains emission limits for NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, CO, and VOC. This unit has no add-on controls for SO<sub>X</sub>, PM<sub>10</sub> or VOC emissions. Therefore, this unit is not subject to CAM for SO<sub>X</sub>, PM<sub>10</sub> or VOC emissions. Based on 40 CFR 64.2(b)(1)(vi), NO<sub>X</sub> and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous compliance determination method for both NO<sub>X</sub> and CO.

#### <u>S-3746-3-3:</u>

- 1) This unit contains emission limits for  $PM_{10}$  only.
- 2) This unit has no add-on controls for  $PM_{10}$  emissions; therefore, it is not subject to CAM for any pollutant.

#### <u>S-3746-4-2:</u>

- 1) This unit contains emission limits for  $NO_X$ ,  $SO_X$ ,  $PM_{10}$ , CO, and VOC.
- 2) This unit has no add-on controls; therefore, it is not subject to CAM for any pollutant.

#### 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

The applicant does not propose to use any model general permit templates.

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

The applicant does not propose to use any model general permit templates.

#### 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 permits for this renewal project.

#### Χ. **PERMIT CONDITIONS**

See Attachment A – Draft Renewed Title V Operating Permit.

#### **ATTACHMENTS** XI.

- Draft Renewed Title V Operating Permit Α.
- Previous Title V Operating Permit Detailed Facility List Β.
- C.

# ATTACHMENT A

# Draft Renewed Title V Operating Permits

# San Joaquin Valley Air Pollution Control District

FACILITY: S-3746-0-3

EXPIRATION \$/30/2013

# FACILITY-WIDE REQUIREMENTS

- {4362} 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
- {4363} 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. {4364} 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. {4365} 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. {4366} 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. {4367} 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. {4368} 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. {4369} 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. {4370} 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 FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE
   These terms and conditions are part of the Facility-wide Requirements to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility-wide Requirements for S-3746-0-3 (continued)

- 10. {4371} 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. {4372} 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. {4373} 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. {4374} 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. {4375} 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. {4376} 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. {4377} 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. {4378} 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. {4379} 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. {4380} 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. {4381} 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. {4382} 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

FACILITY WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility-wide Requirements for S-3746-0-3 (continued)

- 22. {4383} 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
- 23. {4384} 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. {4385} 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. {4386} 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. {4387} 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. {4388} 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. {4389} 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. {4390} 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
- {4391} 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
- {4392} 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. {4393} 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. {4394} 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility-wide Requirements for S-3746-0-3 (continued)

- 34. {4395} 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. {4396} 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. {4397} 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. {4398} 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. {4399} 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: Rule 111 (Kern). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 4401} 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. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3746-1-9

# EXPIRATION DATE 06/30/2013

SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

#### **EQUIPMENT DESCRIPTION:**

160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)

# PERMIT UNIT REQUIREMENTS

- Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. CTG shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [40 CFR 60.334(c), District Rules 1080, 2201 and 4703, 40 CFR 64, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 4. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District NSR Rule, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 5. The facility shall 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
- 6. 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
- 7. {2255} 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

- 8. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 13. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA (Attn: AIR-5). 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 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, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred; And reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The averaged may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [40 CFR 64, District Rule 1080 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 14. 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. 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 64 and 40 CFR 60.334(j)(1)(iii)] Federally Enforceable Through Title V Permit
- 15. 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) and District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SUNRISE POWER COMPANY Location: 12857 SUNRISE POWER ROAD, FELLOWS, CA 93244

- 16. 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), and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 17. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 20. CTG shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [40 CFR 60.333(b), District NSR Rule, PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 21. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 0.25 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(1) & (3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Sulfur compound emissions shall not exceed 0.015% by volume at 15% oxygen, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 23. Startup is defined as the period beginning with turbine initial firing. Shutdown is defined by the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed 60 minutes for a hot startup, 128 minutes for a warm startup, and 230 minutes for a cold startup, and one hour for a shutdown, per occurrence. [District Rules 2201, 4001 & 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 24. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
- 25. 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
- 26. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
- 27. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.332(a) and (b) and District Rule 4703] Federally Enforceable Through Title V Permit
- 28. An owner or operator of any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703] Federally Enforceable Through Title V Permit
- 29. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District NSR Rule] Federally Enforceable Through Title V Permit

- 30. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines (S-3746-1 and -2) heat recovery steam generator exhausts shall not exceed any of the following: NOx (as NO2) 700 lb and CO 1,580 lb, in any one hour. If any CTG is in either startup or shutdown mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Emission rates from each CTG, except during startup and/or shutdown, shall not exceed any of the following: PM10 17.8 lb/hr, SOx (as SO2) 1.55 lb/hr, NOx (as NO2) 15.96 lb/hr and 2.0 ppmvd @ 15% O2, VOC 5.51 lb/hr and 2.0 ppmvd @ 15% O2, CO 19.22 lb/hr and 4 ppmvd @ 15% O2, ammonia 10 ppmvd @ 15%O2. NOx (as NO2) ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmvd and lb/hr limits are three-hour rolling averages. If a CTG is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to the aforementioned limits during that clock hour. [40 CFR 60.332(a)(1), District Rules 2201, 4001, 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 32. Emission rates from each CTG shall not exceed any of the following: PM10 461.2 lb/day, SOx (as SO2) 37.2 lb/day, NOx (as NO2) 1,170.9 lb/day, VOC 220.6 lb/day, and CO 2,443.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 33. Emission rates from both CTGs (S-3746-1 and -2) shall not exceed any of the following: PM10 922.3 lb/day, SOx (as SO2) 74.4 lb/day, NOx (as NO2) 2,341.8 lb/day, VOC 441.2 lb/day, and CO 4,886.8 lb/day. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 34. Annual emissions from both CTGs calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM10 269,651 lb/year, SOx (as SO2) 24,259 lb/year, NOx (as NO2) 311,337 lb/year, VOC 87,674 lb/year, and CO 507,978 lb/year. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 35. Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 36. Daily emissions will be compiled for a twenty-four period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions will commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions will be compiled from the twelve most recent calendar months. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 37. Ammonia slip limit shall be measured using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102] Federally Enforceable Through Title V Permit
- 38. Short term emission limits (lb/hr and ppmv @ 15% O2) shall be measured annually by District witnessed in-situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rules 1081 and 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 39. Startup NOx, CO, and VOC mass emission limits shall be measured for one of the CTGs (S-3746-1, or -2) at least every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit

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

- 40. The District and the EPA must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 41. The following test methods shall be used PM10: EPA method 5 (front half and back half) or 201A, 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 or ASTM D6228. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.335(a) & (c), District Rules 1081, 4001, 4703, and PSD SJ 01-01] 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 either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling average records of NOx and CO emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- 44. The permittee shall maintain records of SOx lb/hr, lb/day, and lb/twelve month rolling average emission. SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 45. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 46. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.7(b), 40 CFR 60.8(d), District Rules 1080 and 2201, 40 CFR 64 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 47. 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 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 48. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, and duration of each start-up and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 49. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 50. 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 Part 75] Federally Enforceable Through Title V Permit
- 51. 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 Part 75] Federally Enforceable Through Title V Permit

- 52. 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 Part 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 Part 73] Federally Enforceable Through Title V Permit
- 53. 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 Part 77] Federally Enforceable Through Title V Permit
- 54. 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 Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 55. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 56. 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 Part 73] Federally Enforceable Through Title V Permit
- 57. 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 Part 72.7 and Part 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 Part 72] Federally Enforceable Through Title V Permit
- 58. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 59. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 60. 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 Part 77] Federally Enforceable Through Title V Permit
- 61. 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 Part 77] Federally Enforceable Through Title V Permit
- 62. 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 Part 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 Part 72] Federally Enforceable Through Title V Permit
- 63. 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 Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 64. 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 Brogram, including those under 40 CFR Part 75 Subpart I. [40] CFR Part 75] Federally Enforceable Through Title V Permit

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

- 65. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Kern) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 66. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1) and (b), 60.333 (a) and (b), 60.334 (c), h(1), h(3) and (j), and 60.335 (a), (b)(3), and (c); District Rule 4703 (as amended 09/20/07), Sections 5.1.3, 5.2, 5.3, 6.1, 6.3.1, 6.3.3, 6.4.1, 6.4.2, 6.4.3, and 6.4.5 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 67. {2282} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SUNRISE POWER COMPANY Location: 12857 SUNRISE POWER ROAD, FELLOWS, CA 95244

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3746-2-9

EXPIRATION

#### SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

#### **EQUIPMENT DESCRIPTION:**

160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)

# PERMIT UNIT REQUIREMENTS

- Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. CTG shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [40 CFR 60.334(c), District Rules 1080, 2201 and 4703, 40 CFR 64, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 4. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District NSR Rule, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 5. The facility shall 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
- 6. 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
- {2255} 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

CONTINUE ON NEXT PAGE

PERMIT UNIT REQUIREMENTS

- 8. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, and 40 CFR 64] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 13. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA (Attn: AIR-5). 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 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, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred; And reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The averaged may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [40 CFR 64, District Rule 1080 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 14. 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. 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 64 and 40 CFR 60.334(j)(1)(iii)] Federally Enforceable Through Title V Permit
- 15. 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) and District Rule 4703] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SUNRISE POWER COMPANY Location: 12857 SUNRISE POWER ROAD, FELLOWS, CA 93244

- 16. 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), and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit
- 17. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
- 18. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District NSR Rule] Federally Enforceable Through Title V Permit
- 19. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 20. CTG shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [40 CFR 60.333(b), District NSR Rule, PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 21. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 0.25 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(1) & (3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 22. Sulfur compound emissions shall not exceed 0.015% by volume at 15% oxygen, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 23. Startup is defined as the period beginning with turbine initial firing. Shutdown is defined by the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed 60 minutes for a hot startup, 128 minutes for a warm startup, and 230 minutes for a cold startup, and one hour for a shutdown, per occurrence. [District Rules 2201, 4001 & 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 24. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703] Federally Enforceable Through Title V Permit
- 25. 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
- 26. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
- 27. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.332(a) and (b) and District Rule 4703] Federally Enforceable Through Title V Permit
- 28. An owner or operator of any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b)(3) and District Rule 4703] Federally Enforceable Through Title V Permit
- 29. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District NSR Rule] Federally Enforceable Through Title V Permit

- 30. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines (S-3746-1 and -2) heat recovery steam generator exhausts shall not exceed any of the following: NOx (as NO2) 700 lb and CO 1,580 lb, in any one hour. If any CTG is in either startup or shutdown mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 31. Emission rates from each CTG, except during startup and/or shutdown, shall not exceed any of the following: PM10 17.8 lb/hr, SOx (as SO2) 1.55 lb/hr, NOx (as NO2) 15.96 lb/hr and 2.0 ppmvd @ 15% O2, VOC 5.51 lb/hr and 2.0 ppmvd @ 15% O2, CO 19.22 lb/hr and 4 ppmvd @ 15% O2, ammonia 10 ppmvd @ 15%O2. NOx (as NO2) ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmvd and lb/hr limits are three-hour rolling averages. If a CTG is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to the aforementioned limits during that clock hour. [40 CFR 60.332(a)(1), District Rules 2201, 4001, 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 32. Emission rates from each CTG shall not exceed any of the following: PM10 461.2 lb/day, SOx (as SO2) 37.2 lb/day, NOx (as NO2) 1,170.9 lb/day, VOC 220.6 lb/day, and CO 2,443.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 33. Emission rates from both CTGs (S-3746-1 and -2) shall not exceed any of the following: PM10 922.3 lb/day, SOx (as SO2) 74.4 lb/day, NOx (as NO2) 2,341.8 lb/day, VOC 441.2 lb/day, and CO 4,886.8 lb/day. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 34. Annual emissions from both CTGs calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM10 269,651 lb/year, SOx (as SO2) 24,259 lb/year, NOx (as NO2) 311,337 lb/year, VOC 87,674 lb/year, and CO 507,978 lb/year. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 35. Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 36. Daily emissions will be compiled for a twenty-four period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions will commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions will be compiled from the twelve most recent calendar months. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 37. Ammonia slip limit shall be measured using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102] Federally Enforceable Through Title V Permit
- 38. Short term emission limits (lb/hr and ppmv @ 15% O2) shall be measured annually by District witnessed in-situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rules 1081 and 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 39. Startup NOx, CO, and VOC mass emission limits shall be measured for one of the CTGs (S-3746-1, or -2) at least every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit

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

- 40. The District and the EPA must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 41. The following test methods shall be used PM10: EPA method 5 (front half and back half) or 201A, 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 or ASTM D6228. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [40 CFR 60.335(a) & (c), District Rules 1081, 4001, 4703, and PSD SJ 01-01] 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 either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703] Federally Enforceable Through Title V Permit
- 43. The permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling average records of NOx and CO emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- 44. The permittee shall maintain records of SOx lb/hr, lb/day, and lb/twelve month rolling average emission. SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 45. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
- 46. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.7(b), 40 CFR 60.8(d), District Rules 1080 and 2201, 40 CFR 64 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 47. 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 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 48. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, and duration of each start-up and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 49. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rules 2201 and 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 50. 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 Part 75] Federally Enforceable Through Title V Permit
- 51. 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 Part 75] Federally Enforceable Through Title V Permit

- 52. 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 Part 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 Part 73] Federally Enforceable Through Title V Permit
- 53. 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 Part 77] Federally Enforceable Through Title V Permit
- 54. 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 Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 55. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 56. 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 Part 73] Federally Enforceable Through Title V Permit
- 57. 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 Part 72.7 and Part 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 Part 72] Federally Enforceable Through Title V Permit
- 58. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 59. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 60. 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 Part 77] Federally Enforceable Through Title V Permit
- 61. 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 Part 77] Federally Enforceable Through Title V Permit
- 62. 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 Part 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 Part 72] Federally Enforceable Through Title V Permit
- 63. 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 Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 64. 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 Brogram, including those under 40 CFR Part 75 Subpart I. [40 CFR Part 75] Federally Enforceable Through Title V Permit

PERMIT/UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

- 65. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Kern) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 66. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1) and (b), 60.333 (a) and (b), 60.334 (c), h(1), h(3) and (j), and 60.335 (a), (b)(3), and (c); District Rule 4703 (as amended 09/20/07), Sections 5.1.3, 5.2, 5.3, 6.1, 6.3.1, 6.3.3, 6.4.1, 6.4.2, 6.4.3, and 6.4.5 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 67. {2282} Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

PERMIT UNIT: S-3746-3-3

SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

### **EQUIPMENT DESCRIPTION:**

137,000 GPM COOLING TOWER WITH HIGH EFFICIENCY DRIFT ELIMINATOR

### PERMIT UNIT REQUIREMENTS

- 1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 2. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit
- 3. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. PM10 emission rate shall not exceed 15.78 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Compliance with the PM10 daily emission limit shall be demonstrated as follows: PM10 lb/day = circulating water recirculation rate \* total dissolved solids concentration in the blowdown water \* design drift rate \* correction factor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 6. Compliance with PM10 emission limit shall be determined quarterly by circulating water sample analysis performed by an independent laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 7. The operator shall maintain records of all circulating water tests performed. Records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

acility-wide Permit to Operate. These terms and conditions are ba Facility Name: SUNRISE POWER COMPANY Location: 12857 SUNRISE POWER ROAO, FELLOWS, CA 932 S-3746-3-3: Apr 8 2014 3:44PM - BRARG

EXPIRATIO

#### **PERMIT UNIT:** S-3746-4-2

#### **EQUIPMENT DESCRIPTION:**

Facility Name: SUNRISE POWER COMPANY

Location: 12857 SUNRISE POWER ROAD, FELLOWS, CA 932 S-37464-2: Apr 9 2014 5:27PM - BRARG EXPIRATION DATE 06/30/2013

TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

### PERMIT UNIT REQUIREMENTS

- 1. Permittee shall provide written notification to the District within 48 hours of operating unit under this permit (if unit is located onsite longer than 24 hours). Such notification shall include the date the unit was brought onsite, the manufacturer, model number, maximum rating, and emissions information that documents that the unit meets the emission limits and requirements specified in the permit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 4. The engine shall not operate unless permit units S-3746-1 and S-3746-2 are shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. This nonroad transportable engine shall not be operated at one location for more than 12 consecutive months and shall meet all the requirements of a nonroad transportable engine, per CFR Title 40 Part 89. [CCR, Title 17 and District Rule 4701] Federally Enforceable Through Title V Permit
- 6. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
- 7. Any engine utilized by this permit shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 8. Permittee shall monitor the operational characteristics of the engine as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO-approved alternative. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 10. Operation of IC engine shall not exceed 200 hours/yr without prior District approval through issuance of an Authority to Construct. [District Rules 2201, 4102, and 4702] Federally Enforceable Through Title V Permit
- 11. NOx emissions (referenced as NO2) shall not exceed 2.3 g/bhp-hr. [District Rule 2201 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 12. VOC emissions (referenced as methane) shall not exceed 0.16 g/bhp-hr. [District Rule 2201 and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 13. CO emissions shall not exceed 0.6 g/bhp-hr. [District Rule 230] and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

- 14. The PM10 emissions rate from the engine shall not exceed 0.12 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 15. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801; and 40 CFR Part 60 Subpart IIII] Federally Enforceable Through Title V Permit
- 16. Any engine utilized by this permit shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. The operator shall maintain records of the cumulative hours of operation on a 12 month rolling average, type of fuel used and the purpose for operating the engine. These records shall be updated at least monthly. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 18. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate. Facility Name: SUNRISE POWER COMPANY Location: 12857 SUNRISE POWER ROAD, FELLOWS, CR 05244

# ATTACHMENT B

## Previous Title V Operating Permits

FACILITY: S-3746-0-2

### EXPIRATION DATE: 06/30/2013

### FACILITY-WIDE REQUIREMENTS

- 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 Rule 111 (Kern)] 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 Rule 111 (Kern)] 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, 9.8.1 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

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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-wide Requirements for S-3746-0-2 (continued)

- 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 (12/17/05). 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] Federally Enforceable Through Title V Permit

Facility-wide Requirements for S-3746-0-2 (continued)

- 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 (10/31/01) 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 (10/31/01) 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 (10/31/01). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (08/19/04) or Rule 8011 (08/19/04). [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 (09/16/04) or Rule 8011 (08/19/04). [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

Facility-wide Requirements for S-3746-0-2 (continued)

- 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: Rule 111 (Kern). 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 (02/17/05); 4601, sections 5.1, 5.2, 5.3, 5.8 and 8.0 (10/31/01); 8021 (08/19/04); 8031 (08/19/04); 8041 (08/19/04); 8051 (08/19/04); 8061 (08/19/04); and 8071 (09/16/04). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

#### PERMIT UNIT: S-3746-1-8

#### EXPIRATION DATE: 06/30/2013

#### SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

#### **EQUIPMENT DESCRIPTION:**

160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)

### PERMIT UNIT REQUIREMENTS

- Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. CTG shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rule 1080, 6.5, District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 4. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The facility shall 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
- 6. 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
- 7. 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

- 8. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 10. 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] Federally Enforceable Through Title V Permit
- 11. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 13. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA (Attn: AIR-5). 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 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, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred; And reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The averaged may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [District Rule 1080, 8.0 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 14. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 17. CTG shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District NSR Rule, PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 18. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 0.25 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2]

- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 20. Startup is defined as the period beginning with turbine initial firing. Shutdown is defined by the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed 60 minutes for a hot startup, 128 minutes for a warm startup, and 230 minutes for a cold startup, and one hour for a shutdown, per occurrence. [District NSR Rule, District Rules 4001 & 4703, 5.3.3; and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 21. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703, 3.23 & 5.3.1.4] Federally Enforceable Through Title V Permit
- 22. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
- 23. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
- 24. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.332(a) and (b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
- 25. An owner or operator of any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
- 26. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines (S-3746-1 and -2) heat recovery steam generator exhausts shall not exceed any of the following: NOx (as NO2) 700 lb and CO 1,580 lb, in any one hour. If any CTG is in either startup or shutdown mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 28. Emission rates from each CTG, except during startup and/or shutdown, shall not exceed any of the following: PM10 17.8 lb/hr, SOx (as SO2) 1.55 lb/hr, NOx (as NO2) 15.96 lb/hr and 2.0 ppmvd @ 15% O2, VOC 5.51 lb/hr and 2.0 ppmvd @ 15% O2, CO 19.22 lb/hr and 4 ppmvd @ 15% O2, ammonia 10 ppmvd @ 15%O2. NOx (as NO2) ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmvd and lb/hr limits are three-hour rolling averages. If a CTG is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to the aforementioned limits during that clock hour. [District NSR Rule, and District Rules 4001, 4703, 5.1.2 and 5.3; and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 29. Emission rates from each CTG shall not exceed any of the following: PM10 461.2 lb/day, SOx (as SO2) 37.2 lb/day, NOx (as NO2) 1,170.9 lb/day, VOC 220.6 lb/day, and CO 2,443.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. Emission rates from both CTGs (S-3746-1 and -2) shall not exceed any of the following: PM10 922.3 lb/day, SOx (as SO2) 74.4 lb/day, NOx (as NO2) 2,341.8 lb/day, VOC 441.2 lb/day, and CO 4,886.8 lb/day. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 31. Annual emissions from both CTGs calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM10 269,651 lb/year, SOx (as SO2) 24,259 lb/year, NOx (as NO2) 311,337 lb/year, VOC 87,674 lb/year, and CO 507,978 lb/year. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit

- 32. Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 33. Daily emissions will be compiled for a twenty-four period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions will commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions will be compiled from the twelve most recent calendar months. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 34. Ammonia slip limit shall be measured using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102] Federally Enforceable Through Title V Permit
- 35. Short term emission limits (lb/hr and ppmv @ 15% O2) shall be measured annually by District witnessed in-situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 36. Startup NOx, CO, and VOC mass emission limits shall be measured for one of the CTGs (S-3746-1, or -2) at least every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
- 37. The District and the EPA must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 38. The following test methods shall be used PM10: EPA method 5 (front half and back half) or 201A, 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 or ASTM D6228. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, 4703, 6.4 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, 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
- 40. The permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling average records of NOx and CO emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain records of SOx lb/hr, lb/day, and lb/twelve month rolling average emission. SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 42. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

- 43. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d), District NSR Rule, District Rule 1080, 7.0 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 44. 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 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, and duration of each start-up and each shutdown time period. [District Rule 4703, 6.2.6 & 6.2.7] Federally Enforceable Through Title V Permit
- 46. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 47. 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 Part 75] Federally Enforceable Through Title V Permit
- 48. 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 Part 75] Federally Enforceable Through Title V Permit
- 49. 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 Part 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 Part 73] Federally Enforceable Through Title V Permit
- 50. 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 Part 77] Federally Enforceable Through Title V Permit
- 51. 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 Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 52. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 53. 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 Part 73] Federally Enforceable Through Title V Permit
- 54. 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 Part 72.7 and Part 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 Part 72] Federally Enforceable Through Title V Permit
- 55. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR Part 72] Federally Enforceable Through Title V Permit

- 57. 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 Part 77] Federally Enforceable Through Title V Permit
- 58. 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 Part 77] Federally Enforceable Through Title V Permit
- 59. 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 Part 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 Part 72] Federally Enforceable Through Title V Permit
- 60. 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 Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 61. 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 Part 75 Subpart I. [40 CFR Part 75] Federally Enforceable Through Title V Permit
- 62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Kern) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f), 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3), and 60.335(b), (c)(2), (c)(3), and (d); District Rule 4703 (as amended 09/20/07), Sections 5.1.2, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 64. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

#### PERMIT UNIT: S-3746-2-8

#### EXPIRATION DATE: 06/30/2013

### SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

#### **EQUIPMENT DESCRIPTION:**

160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)

### PERMIT UNIT REQUIREMENTS

- Combustion turbine generator (CTG) and electrical generator lube oil vents shall be equipped with mist eliminators to maintain visible emissions from lube oil vents no greater than 5% opacity, except for three minutes in any hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 2. CTG shall be equipped with continuously recording fuel gas flowmeter. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O2. Continuous emissions monitors shall meet the requirements of 40 CFR Part 60, Appendices B and F, and 40 CFR Part 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. If relative accuracy of CEM(s) cannot be demonstrated during startup conditions, CEM results during startup and shutdown events shall be replaced with startup emission rates obtained from source testing to determine compliance with emission limits. [District Rule 1080, 6.5, District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 4. CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purposes of calculating ammonia slip. Permittee shall check, record, and quantify the calibration drift (CD) at two concentration values at least once daily (approximately 24 hours). The calibration shall be adjusted whenever the daily zero or high-level CD exceeds 5%. If either the zero or high-level CD exceeds 5% for five consecutive daily periods, the analyzer shall be deemed out-of-control. If either the zero or high-level CD exceeds 10% during any CD check, analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the permittee shall take appropriate corrective action and then repeat the CD check. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. The facility shall 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
- 6. 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
- 7. 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

- 8. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 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] Federally Enforceable Through Title V Permit
- 11. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 13. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA (Attn: AIR-5). 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 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, except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred; And reports on opacity monitors giving the number of three minute periods during which the average opacity exceeded the standard for each hour of operation. The averaged may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute. Any time exempted shall be considered before determining the excess averages of opacity. [District Rule 1080, 8.0 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 14. Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
- 15. Permittee shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District NSR Rule] Federally Enforceable Through Title V Permit
- 16. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 17. CTG shall be fired exclusively on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.25 grains of sulfur compounds (as S) per 100 dry scf of natural gas. [District NSR Rule, PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 18. The sulfur content of each fuel source shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 0.25 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six (6) months. If any six (6) month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2]

- 19. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [40 CFR 60.333(a); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit
- 20. Startup is defined as the period beginning with turbine initial firing. Shutdown is defined by the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed 60 minutes for a hot startup, 128 minutes for a warm startup, and 230 minutes for a cold startup, and one hour for a shutdown, per occurrence. [District NSR Rule, District Rule 4001 & 4703, 5.3.3; and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 21. Reduced load period is defined as the time during which a gas turbine is operated at less than rated capacity in order to change the position of the exhaust gas diverter gate. Each reduced load period shall not exceed one hour. [District Rule 4703, 3.23] Federally Enforceable Through Title V Permit
- 22. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703, 5.3.2] Federally Enforceable Through Title V Permit
- 23. The owner or operator shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when the CEMS is not operating properly. [District Rule 4703, 6.2.5] Federally Enforceable Through Title V Permit
- 24. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [40 CFR 60.332(a) and (b) and District Rule 4703, 6.4.5] Federally Enforceable Through Title V Permit
- 25. An owner or operator of any gas turbine with an intermittently operated auxiliary burner shall demonstrate compliance with the auxiliary burner both on and off. [40 CFR 60.335(b) and District Rule 4703, 6.3.3] Federally Enforceable Through Title V Permit
- 26. Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500 degrees F. Permittee shall monitor and record catalyst temperature during periods of startup. [District NSR Rule] Federally Enforceable Through Title V Permit
- 27. During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines (S-3746-1 and -2) heat recovery steam generator exhausts shall not exceed any of the following: NOx (as NO2) - 700 lb and CO -1,580 lb, in any one hour. If any CTG is in either startup or shutdown mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. [District NSR Rule] Federally Enforceable Through Title V Permit
- 28. Emission rates from each CTG, except during startup and/or shutdown, shall not exceed any of the following: PM10 -17.8 lb/hr, SOx (as SO2) - 1.55 lb/hr, NOx (as NO2) - 15.96 lb/hr and 2.0 ppmvd @ 15% O2, VOC - 5.51 lb/hr and 2.0 ppmvd @ 15% O2, CO - 19.22 lb/hr and 4 ppmvd @ 15% O2, ammonia - 10 ppmvd @ 15%O2. NOx (as NO2) ppmv and lb/hr limits are a one-hour rolling average. Ammonia emission limit is a twenty-four hour rolling average. All other ppmvd and lb/hr limits are three-hour rolling averages. If a CTG is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to the aforementioned limits during that clock hour. [District NSR Rule, and District Rules 4001, 4703, 5.1.2 and 5.3; and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 29. Emission rates from each CTG shall not exceed any of the following: PM10 461.2 lb/day, SOx (as SO2) 37.2 Ib/day, NOx (as NO2) - 1,170.9 lb/day, VOC - 220.6 lb/day, and CO - 2,443.4 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 30. Emission rates from both CTGs (S-3746-1 and -2) shall not exceed any of the following: PM10 922.3 lb/day, SOx (as SO2) - 74.4 lb/day, NOx (as NO2) - 2,341.8 lb/day, VOC - 441.2 lb/day, and CO - 4,886.8 lb/day. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 31. Annual emissions from both CTGs calculated on a twelve consecutive month rolling basis shall not exceed any of the following: PM10 - 269,651 lb/year, SOx (as SO2) - 24,259 lb/year, NOx (as NO2) - 311,337 lb/year, VOC - 87,674 Ib/year, and CO - 507,978 Ib/year. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Location:

S-3746-2-8 : Apr 8 2014 4:42PM --- BRARG

- 32. Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a three-hour rolling average will commence on the hour. The three-hour average will be compiled from the three most recent one-hour periods. Each one-hour period in a twenty-four-hour average for ammonia slip will commence on the hour. The twenty-four-hour average will be calculated starting and ending at twelve-midnight. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 33. Daily emissions will be compiled for a twenty-four period starting and ending at twelve-midnight. Each calendar month in a twelve-consecutive-month rolling emissions will commence at the beginning of the first day of the month. The twelve-consecutive-month rolling emissions total to determine compliance with annual emissions will be compiled from the twelve most recent calendar months. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 34. Ammonia slip limit shall be measured using the following calculation procedure: ammonia slip ppmv @ 15% O2 = ((a-(bxc/1,000,000)) x 1,000,000 / b) x d, where a = ammonia injection rate(lb/hr)/17(lb/lb. mol), b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol), c = change in measured NOx concentration ppmv at 15% O2 across catalyst, and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, permittee may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee must submit a monitoring plan for District review and approval. [District Rule 4102] Federally Enforceable Through Title V Permit
- 35. Short term emission limits (lb/hr and ppmv @ 15% O2) shall be measured annually by District witnessed in-situ sampling of exhaust gases by a qualified independent source test firm at full load conditions as follows NOx: ppmvd @ 15% O2 and lb/hr, CO: ppmvd @ 15% O2 and lb/hr, VOC: ppmvd @ 15% O2 and lb/hr, PM10: lb/hr, and ammonia: ppmvd @ 15% O2. Sample collection to demonstrate compliance with ammonia emission limit shall be based on three consecutive test runs of thirty minutes each. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 36. Startup NOx, CO, and VOC mass emission limits shall be measured for one of the CTGs (S-3746-1, or -2) at least every seven years by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081] Federally Enforceable Through Title V Permit
- 37. The District and the EPA must be notified 30 days prior to any source test, and a source test plan must be submitted for approval 15 days prior to testing. Official test results and field data collected by source tests required by conditions on this permit shall be submitted to the District within 60 days of testing. [District Rule 1081 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 38. The following test methods shall be used PM10: EPA method 5 (front half and back half) or 201A, 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 or ASTM D6228. EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081, 4001, 4703, 6.4 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, 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
- 40. The permittee shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling average records of NOx and CO emissions. [District NSR Rule] Federally Enforceable Through Title V Permit
- 41. The permittee shall maintain records of SOx lb/hr, lb/day, and lb/twelve month rolling average emission. SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District NSR Rule] Federally Enforceable Through Title V Permit
- 42. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

- 43. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [40 CFR 60.8(d), District NSR Rule, District Rule 1080, 7.0 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 44. 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 and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 45. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local startup and stop time, length and reason for reduced load periods, total hours of operation, the type and quantity of fuel used, and duration of each start-up and each shutdown time period. [District Rule 4703, 6.2.6 & 6.2.7] Federally Enforceable Through Title V Permit
- 46. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District NSR Rule and PSD SJ 01-01] Federally Enforceable Through Title V Permit
- 47. 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 Part 75] Federally Enforceable Through Title V Permit
- 48. 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 Part 75] Federally Enforceable Through Title V Permit
- 49. 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 Part 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 Part 73] Federally Enforceable Through Title V Permit
- 50. 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 Part 77] Federally Enforceable Through Title V Permit
- 51. 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 Part 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 52. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 53. 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 Part 73] Federally Enforceable Through Title V Permit
- 54. 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 Part 72.7 and Part 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 Part 72] Federally Enforceable Through Title V Permit
- 55. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40 CFR Part 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR Part 72] Federally Enforceable Through Title V Permit

- 57. 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 Part 77] Federally Enforceable Through Title V Permit
- 58. 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 Part 77] Federally Enforceable Through Title V Permit
- 59. 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 Part 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 Part 72] Federally Enforceable Through Title V Permit
- 60. 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 Part 72, 40 CFR Part 75] Federally Enforceable Through Title V Permit
- 61. 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 Part 75 Subpart I. [40 CFR Part 75] Federally Enforceable Through Title V Permit
- 62. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Kern) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 63. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332(a), (a)(1), (a)(2), (b), and (f), 60.333 (a) and (b); 60.334(a), (b)(2), (c)(1), (c)(2), and (c)(3), and 60.335(b), (c)(2), (c)(3), and (d); District Rule 4703 (as amended 09/20/07), Sections 5.1.2, 5.2, 6.1, 6.3.1, 6.3.3, 6.4, 6.4.5, and 6.4.6 as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 64. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

**PERMIT UNIT: S-3746-3-2** 

EXPIRATION DATE: 06/30/2013

### SECTION: SW23 TOWNSHIP: 31S RANGE: 22E

### **EQUIPMENT DESCRIPTION:**

137,000 GPM COOLING TOWER WITH HIGH EFFICIENCY DRIFT ELIMINATOR

### PERMIT UNIT REQUIREMENTS

- 1. No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit
- 2. Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit
- 3. PM10 emission rate shall not exceed 15.78 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
- 4. Compliance with the PM10 daily emission limit shall be demonstrated as follows: PM10 lb/day = circulating water recirculation rate \* total dissolved solids concentration in the blowdown water \* design drift rate \* correction factor. [District NSR Rule] Federally Enforceable Through Title V Permit
- 5. Compliance with PM10 emission limit shall be determined quarterly by circulating water sample analysis performed by an independent laboratory. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
- 6. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
- 7. The operator shall maintain records of all circulating water tests performed. Records shall be maintained for at least 5 years and shall be made available to the District upon request. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT: S-3746-4-1

### EXPIRATION DATE: 06/30/2013

#### **EQUIPMENT DESCRIPTION:**

TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

### PERMIT UNIT REQUIREMENTS

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Permittee shall provide written notification to the District within 48 hours of operating unit under this permit (if unit is located onsite longer than 24 hours). Such notification shall include the date the unit was brought onsite, the manufacturer, model number, maximum rating, and emissions information that documents that the unit meets the emission limits and requirements specified in the permit. [District Rule 1070] Federally Enforceable Through Title V Permit
- 3. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 4. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO-approved alternative. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 6. This nonroad transportable engine shall not be operated at one location for more than 12 consecutive months and shall meet all the requirements of a nonroad transportable engine, per CFR Title 40 Part 89. [CCR, Title 17 and District Rule 4701] Federally Enforceable Through Title V Permit
- 7. The engine shall not operate unless permit units S-3746-1 and S-3746-2 are shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Permittee shall properly operate and maintain engine and monitor the operational characteristics of the engine as recommended by the engine manufacturer. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102] Federally Enforceable Through Title V Permit
- 10. Operation of IC engine shall not exceed 200 hours/yr without prior District approval through issuance of an Authority to Construct. [District Rules 2201, 4102, and 4702] Federally Enforceable Through Title V Permit
- 11. NOx emissions (referenced as NO2) shall not exceed 2.3 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. VOC emissions (referenced as methane) shall not exceed 0.16 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. CO emissions shall not exceed 0.6 g/bhp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. The PM10 emissions rate from the engine shall not exceed 0.12 g/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit

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

- 15. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201] Federally Enforceable Through Title V Permit
- 16. The operator shall maintain records of the cumulative hours of operation on a 12 month rolling average. These records shall be updated at least monthly. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 17. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

## ATTACHMENT C

**Detailed Facility List** 

. د

.

### **Detailed Facility Report** For Facility=3746 Sorted by Facility Name and Permit Number

4/9/14 9:09 am

~

	VER COMPANY E POWER ROAD 93244		FAC # STATUS: TELEPHONE:				TYPE: TitleV EXPIRE ON: 06/30/2013 TOXIC ID: AREA: 6 / INSP. DATE: 12/14
PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-3746-1-8	292.5 MW	3020-08B H	1	13,208.00	13,208.00	А	160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #1 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)
S-3746-2-8	292.5 MW	3020-08B H	1	13,208.00	13,208.00	A	160 MW NOMINALLY RATED COMBINED-CYCLE POWER GENERATING SYSTEM #2 CONSISTING OF GENERAL ELECTRIC FRAME 7FA, NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH DRY LOW-NOX COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING)
S-3746-3-2	Cooling tower	999-99	1	0.00	0.00	А	137,000 GPM COOLING TOWER WITH HIGH EFFICIENCY DRIFT ELIMINATOR
S-3746-4-1	532 BHP	3020-10 D	1	479.00	479.00	А	TRANSPORTABLE TIER-3 CERTIFIED DIESEL-FIRED IC ENGINE UP TO 532 HP POWERING AN ELECTRICAL GENERATOR

Number of Facilities Reported: 1