DOCKETED	
Docket Number:	98-AFC-04C
Project Title:	Sunrise Cogeneration Power Project (Compliance)
TN #:	256480
Document Title:	Sunrise Power Plant Repowering Project - PTA
Description:	Petition to Amend the Sunrise Power Plant -Repowering Project
Filer:	Ashley Gutierrez
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	5/21/2024 12:32:00 PM
Docketed Date:	5/21/2024

Sunrise Power Company LLC
12857 Sunrise Power Rd
Fellows, Ca 93224
(661)768-5000

21 May 2024

California Energy Commission
Siting, Transmission, and Environmental Protection Division (STEP)
Safety and Reliability Branch
Compliance Monitoring and Enforcement Unit
715 P Street, MS-2000, Sacramento, CA 95814

Re: **Revision to 2022 PTA "Sunrise Repowering Project"**

Ashley Gutierrez,

In 2022 Sunrise submitted a PTA "Power Improvement Package" based on a plant output uprate to 635Mw's. To enable use of the additional, uprate capacity, during interconnect agreement renewal discussions with PG&E, Sunrise requested an additional 35 Mw's above the approved existing 2000 agreement capacity of 600Mw's. The increased capacity of 35 Mw's was denied, restricting possible plant output load to original 600Mw limit.

The result of the interconnect discussion put Sunrise under a new Large Generator Interconnection Agreement dated May 23, 2023. The agreement is between Sunrise Power Company, LLC., Pacific Gas and Electric Company (PG&E) and California Independent System Operator (CaISO), giving Sunrise the right to inject 600Mw's in the PG&E electrical system at the point of interconnection, Midway Substation. Due to the 600Mw agreement limitation, Sunrise changed uprate providers from GE to PSM. The PSM (596 Mw) proposal was a more suitable capacity match and provided corresponding better economics.

The PSM project was selected since Sunrise can continue to operate within the approved existing interconnect service agreement, wouldn't require additional changes, studies, or system upgrades prior to being installed and the uprate capacity would be fully available. Staying with the GE package, under the approved interconnect agreement, restricted the uprate MW capability and eliminated the ability to recover associated incremental cost.

The following attachment is a comparison of uprate parts needed from each vendor for their proposed uprates. The pieces marked "No" from PSM will have either a reconditioned or a new piece of the current technology installed during the upcoming uprate outage.

If you have any questions. please contact David King at (661) 768-5006.

Sincerely,

David King
Plant Manager

Sunrise Power Company

Attachment

Combustion & Turbine Uprate Hardware by Vendor

Upgraded Components	GE Uprate Hardware 2022	PSM Uprate Hardware 2024
Fuel Gas Headers	Yes	No
Combustion Fuel Nozzles	Yes	No
Transition Pieces	Yes	Yes
1st Stage Turbine Nozzles	Yes	Yes
1st Stage Turbine Shroud	Yes	No
1st Stage Turbine Buckets	Yes	No
2nd Stage Turbine Nozzles	Yes	Yes
2nd Stage Turbine Shroud	Yes	No
2nd Stage Turbine Buckets	Yes	No
3rd Stage Turbine Nozzles	Yes	No
3rd Stage Turbine Shroud	Yes	No
3rd Stage Turbine Buckets	Yes	No
Compressor	Upgrade to .04 Rotor	Existing .03 Rotor technology with compressor upgrades to S1-S4 blading
Controls	Upgrade to GE MarkVIe	Existing GE Mark VI with added PSM Auto tune

DATE: November 21, 2022

TO: Interested Parties

FROM: Mary Dyas, Compliance Project Manager

SUBJECT: **Sunrise Power Project (98-AFC-04C)**
CEC Staff Analysis of Petition to Amend the Final Commission Decision

On April 12, 2021, the Sunrise Power Company, LLC (project owner) filed a post certification petition (TN #237495) with the California Energy Commission (CEC) requesting to amend the Sunrise Power Project (SPP) Final Commission Decision (Decision).

The SPP is a 585-megawatt (MW) natural gas-fired, combined-cycle power plant located at 12857 Sunrise Power Road in Fellows, Kern County.

The project was certified by the CEC on December 6, 2000, as a simple-cycle peaking facility and began commercial operation on June 27, 2001, in time to generate and deliver power during the summer peak demand of 2001.

On November 19, 2001, the CEC approved a petition to convert the simple-cycle power plant to a combined-cycle facility that began operation on June 1, 2003.

Description of Proposed Change

The project owner is seeking approval for the replacement of a section of the combustion turbine with improved technology, an improved combustion system, an upgraded turbine generator control system, as well as the addition of and revisions to Air Quality conditions of certification. The proposed improvements, referred to as the Sunrise Power Improvement Project, would result in improved performance and increased output and efficiency, increasing the plant's output from 585 MW to ~~635~~ **596** MW.

CEC Staff Review and Conclusions

CEC staff has reviewed the petition pursuant to Title 20, California Code of Regulations, title 20, section 1769(a) (Changes in the Project Design, Operation, or Performance), and assessed the impacts of the proposal on the environment, and the project's compliance with applicable laws, ordinances, regulations, and standards (LORS). Based on staff's analysis, contained below, and staff's discussions with the San Joaquin Valley

Air Pollution Control District (District), staff recommends modifications to the Air Quality conditions of certification (COCs) so the project can operate in conformance with district's standards. Specifically, staff recommends renumbering the Air Quality COCs as well as adding new and updating other COCs with minor revisions to ensure CEC's conditions of certification in the Final Decision, as amended, match current District permit conditions. Since there will be an increase in a daily, quarterly, annual or other emission limit, approval of the amendment must be made by the Commission at a noticed business meeting. Approval is appropriate because, as shown in staff's analysis, none of the conditions or attributes that would prohibit Commission approval, as set forth in Cal. Code Regs., tit. 20, sec 1748(b), are present at the site and related facility, nor in the circumstances surrounding the site and related facility.

Staff concludes that, with the adoption of the recommendations in the analysis below, and with the implementation of the revised COCs, the project would remain in compliance with applicable LORS, and the proposed changes would not result in any significant adverse direct, indirect, or cumulative impacts to the environment. (Cal. Code Regs., tit. 20 sec. 15162.) Staff also concludes the proposed change does not meet any of the criteria requiring the production of subsequent or supplemental review pursuant to Public Resources Code section 21166.

Staff intends to recommend approval of the petition at the December 14, 2022, Business Meeting of the CEC.

The CEC's project webpage, https://www.energy.ca.gov/powerplant/simple-cycle/sunrise-power-project, has a link to the petition and the Staff Analysis on the right side of the webpage in the box labeled "Compliance Proceeding." Click on the "Docket Log (98-AFC-04C)" option. If approved, the CEC's Order approving this petition will also be available from the same webpage.

This letter has been mailed to the CEC's list of interested parties and property owners of all parcels within 500 feet of any affected project linears and 1,000 feet of the project site. It has also been emailed to the SPP list serve. The list serve is an automated the CEC email system by which information about this facility is emailed to parties who have subscribed. To subscribe, go to the CEC's project webpage, cited above, scroll down the right side of the project's webpage to the box labeled "Subscribe," and provide the requested contact information.

Any person may comment on the Staff Analysis. Those who wish to submit comments on the analysis prior to the CEC Business meeting may do so by using the CEC's electronic commenting feature. Go to the CEC's project webpage and click on either the "Comment on this Proceeding," or "Submit e-Comment" link. When your comments are filed, you will receive an email with a link to them.

Written comments may also be mailed or hand-delivered to:

California Energy Commission
Docket Unit, MS-4
Docket No. 98-AFC-04C
715 P Street
Sacramento, CA 95814-5512

Comments will also be accepted during the scheduled business meeting. All comments and materials filed with the Dockets Unit will be added to the facility Docket Log and become publicly accessible on the CEC's project webpage.

If you have questions about this notice, please contact Compliance Project Manager Mary Dyas, Safety and Reliability Office, Compliance Monitoring and Enforcement Unit, at (916) 628-5418 or via e-mail at mary.dyas@energy.ca.gov.

For information on public participation, please contact the CEC's Office of Public Advisor, Energy Equity, and Tribal Affairs at (916) 957-7910 or email at publicadvisor@energy.ca.gov.

News media inquiries should be directed to the CEC's Media Office at (916) 654-4989, or by e-mail to mediaoffice@energy.ca.gov.

Mail List: 714
Listserv: Sunrise Power Project

SUNRISE POWER PROJECT (98-AFC-04C)
Petition to Amend Commission Decision
STAFF ASSESSMENT

Table of Contents

SUNRISE POWER PROJECT (98-AFC-04C)
Petition to Amend Commission Decision
EXECUTIVE SUMMARY

Mary Dyas

INTRODUCTION

On April 12, 2021, the Sunrise Power Company, LLC (project owner) filed a post certification petition (TN #237495) with the California Energy Commission (CEC) requesting to amend the Sunrise Power Project (SPP) Final Commission Decision (Decision).

The SPP is a 585-megawatt (MW) natural gas-fired, combined-cycle power plant is located at 12857 Sunrise Power Road in Fellows, Kern County. The project consists of two 160 MW (Nominal) GE Frame 7FA combustion turbine generators (CTG), two heat recovery steam generators with duct firing, and one steam turbine generator. The system operates with a selective catalytic reduction and oxidation catalyst for both CTG's.

The project was certified by the CEC on December 6, 2000, as a simple-cycle peaking facility and began commercial operation on June 27, 2001, in time to generate and deliver power during the summer peak demand of 2001.

On November 19, 2001, the CEC approved a petition to convert the simple-cycle power plant to a combined-cycle facility that began operation on June 1, 2003.

DESCRIPTION OF PROPOSED CHANGE(S)

The project owner is seeking approval for the replacement of a section of the combustion turbine with improved technology, an improved combustion system, and an upgraded turbine generator control system. The proposed improvements, referred to as the Sunrise Power Improvement Project, would result in improved performance and increased output and efficiency, increasing the plant's output from 585 MW to ~~635~~ **596** MW.

The changes proposed in this petition to amend include the following:

1. Install enhanced hardware to the ~~combustor and~~ turbine sections of both combustion turbine generators and optimize the control logic of the combustion turbines.
2. Add an upgraded ~~General Electric Mark VIe turbine control~~ **PSM Autotune** system incorporating advanced combustion optimization capabilities, which also provides enhanced operational flexibility.
3. Modify the Air Quality conditions of certification in the Decision, as amended.

The purpose of the CEC's review process is to assess whether the project changes proposed in the petition would have a significant impact on the environment or cause the project to not comply with applicable laws, ordinances, regulations, and standards (Cal. Code Regs., tit. 20, § 1769).

NECESSITY FOR THE PROPOSED CHANGE(S)

The primary purpose and need for this petition are to accommodate the replacement of older equipment with more efficient versions. c Improved technology has become available allowing a more efficient combustion process, while accompanied by discreet changes to air quality impacts. The modifications would also address the state's urgent need for additional capacity. The changes would be accomplished by enhancing the operating systems of the equipment to maximize the capability of the plant, resulting in an increased net output of approximately ~~50~~ 11 MW, increasing the plant's output from 585 MW to ~~635~~ **596** MW.

CEC STAFF REVIEW AND CONCLUSION

California Code of Regulations, title 20, section 1769 requires a project owner to petition the CEC for the approval of any change the project owner proposes to the project, design, operation, or performance requirements of a certified facility.

Consistent with California Code of Regulations, title 20, section 1769, CEC staff (staff) has reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations, and standards (LORS). Based on staff's analysis, contained below, staff concludes that, with regard to the proposed changes to SPP (1) there is no possibility that the changes may have a significant effect on the environment, (2) the changes would not cause the project to fail to comply with any applicable LORS, and (3) the changes would not require a change to, or deletion of, any conditions of certification as adopted in the Decision or previous amendments to that decision, if any, except for those related to Air Quality. For the changes to the Air Quality conditions of certification in the Decision and consistent with California Code of Regulations, title 20, section 1769(a)(3)(B), staff has determined the modified SPP (1) would not have a significant effect on the environment, (2) would continue to comply with the applicable LORS, and (3) would increase a daily, quarterly, annual, or other emission limit. Thus, staff is bringing this petition to the Commission for approval pursuant to California Code of Regulations, title 20, section 1769(a)(4).

Staff recommends the renumbering the Air Quality conditions of certification as well as adding new and updating other conditions of certification with minor revisions to ensure CEC's conditions of certification in the Decision, as amended, are consistent with the District's Draft Authority to Construct permit conditions issued on October 3, 2022, and make the effect on the environment less-than-significant.

Staff also concludes that none of the findings specified in California Code of Regulations, title 20, section 1748(b) apply to the proposed changes. Lastly, staff concludes the proposed change does not meet any of the criteria requiring the production of subsequent or supplemental review pursuant to Public Resources Code section 21166 and tit. 20 Cal. Code Regs., sec. 15162.

STAFF'S ASSESSMENT OF THE PROPOSED PETITION

Staff's assessment of the proposed changes considered the potential impacts to the population within the disadvantaged community, including the environmental justice population within a six-mile radius of SPP.

Staff reviewed the petition for potential environmental effects and consistency with applicable LORS. Staff's conclusions for all technical and environmental areas are summarized in **Executive Summary Table 1.**

Executive Summary Table 1
Summary of Conclusions for all Technical and Environmental Areas

Technical Areas Reviewed	CEQA				Conforms with applicable LORS
	Potentially Significant Impact	Less Than Significant Impact with Mitigation (with Revised or New COCs)	Less Than Significant Impact (with or without Existing COCs)	No Impact	
Air Quality		X			X
Biological Resources				X	X
Cultural Resources				X	X
Efficiency				X	
Facility Design					X
Geological and Paleontological Resources				X	X
Hazardous Materials Management			X		X
Land Use				X	X
Noise and Vibration			X		X
Public Health		X			X
Reliability					
Socioeconomics				X	
Soil and Water Resources				X	X
Traffic and Transportation			X		X
Transmission Line Safety and Nuisance				X	X
Transmission System Engineering					X
Visual Resources				X	X
Waste Management				X	X
Worker Safety and Fire Protection			X		X

Areas shown in gray are not subject to CEQA consideration or have no applicable LORS the project must comply with.

For the technical area of Air Quality, staff has proposed new and revised conditions of certification. With the addition of these new and revised Conditions of Certification, the project would continue to comply with all applicable LORS. The proposed project changes would not result in significant impacts to ambient air quality, public health, or greenhouse gas emissions. The details of the proposed additional conditions of certification can be found under the Air Quality section in this Staff Analysis.

For the remaining environmental and technical areas, staff has determined that the modified project would continue to comply with applicable LORS, and the project change would not result in any significant adverse environmental impacts or require a change to any conditions of certification.

The basis for each of staff's conclusions are provided below:

AIR QUALITY

See the **Air Quality, Public Health, and Greenhouse Gas** section of this document.

BIOLOGICAL RESOURCES

The proposed project modifications would occur in previously disturbed and developed areas used for current facility operations. The proposed modifications would not alter the physical appearance of the facility, or require offsite staging, or laydown and heavy haul deliveries. No habitat or vegetation would be disturbed. Therefore, the proposed project modifications would not affect biological resources or require any changes to the existing **Biological Resources** conditions of certification.

CULTURAL RESOURCES

The proposed modification does not require any ground disturbing activities or modification of a historic structure. Therefore, the proposed project modifications would not affect cultural resources or require any changes to the existing **Cultural Resources** conditions of certification.

EFFICENCY

The hot gas path and control system upgrade would slightly increase the nominal turbine rating, capacity output, and efficiency. The increase in thermal efficiency would be roughly three to four percent and the increase in the power plant's maximum net output at the interconnection point would be ~~50~~ **11** MW (from 585 MW to ~~635~~ **596** MW nominal). No LORS apply to power plant efficiency. There would be a slight improvement in the turbine's thermal efficiency, and there would be no adverse impact to power plant efficiency.

FACILITY DESIGN

The modifications proposed in this petition would not involve construction. Therefore, the proposed project modifications would not affect the facility design or require any changes to the existing **Facility Design** conditions of certification.

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

The proposed modifications do not require any ground disturbance activities. Therefore, the proposed project modifications would not affect geological or paleontological resources or require any changes to the existing geological or paleontological conditions of certification.

HAZARDOUS MATERIALS MANAGEMENT

During the proposed installation of the **proposed upgrades** ~~upgraded combustion system~~, several hazardous materials would be used onsite. Like materials used for equipment maintenance activities, these materials would include gasoline, solvents, lubricants, paint, and welding gases. In addition, because of the low volumes to be used, they would not present a significant impact to workers or the offsite public. No extremely hazardous or regulated hazardous materials would be used on site specifically for the installation of the project components and equipment. Therefore, the installation of the upgraded combustion system would not have a significant impact on the facility's hazardous materials management and would continue to comply with all applicable LORS.

LAND USE

Installation of the enhanced hardware and optimized control logic of the gas turbines are equivalent to maintenance and software update activities. The improvements are interior and therefore, the proposed project modifications would not affect land use or require any changes to the existing **Land Use** conditions of certification.

NOISE AND VIBRATION

Activities associated with this petition to amend would be identical to those that take place during normal maintenance activities and outages. Any noise generated during these activities would be temporary, intermittent, and consistent with the local noise ordinance (Kern County Chapter 8.36) and would result in a less-than-significant impact with implementation of the existing Noise conditions of certification in the Decision.

The installation of the hot gas path and control system would not increase noise at nearby residences. The operational noise would not be affected as a result of this petition to amend. Furthermore, the project would continue to meet operational noise requirements established in the Decision. Therefore, the modifications proposed in this petition would create a less-than-significant impact due to operational noise.

PUBLIC HEALTH

See the **Air Quality, Public Health, and Greenhouse Gas** section of this document.

RELIABILITY

The modifications proposed in this petition would not affect the power plant's overall reliability.

SOCIOECONOMICS

Installation of the enhanced hardware and optimized control logic of the gas turbines are equivalent to maintenance and software upgrade activities. The vendor or manufacturer would likely install the updates so no new workforce would be used. Therefore, the proposed project modifications would not affect socioeconomics or require any changes to the existing **Socioeconomics** conditions of certification.

SOIL AND WATER RESOURCES

According to the petition, the proposed modification would not require any ground disturbance. The modifications conform to applicable LORS related to soil and water resources and changes to the existing conditions of certification are not required. Therefore, the modification would not impact soil and water resources.

TRAFFIC AND TRANSPORTATION

Installation of the enhanced hardware and optimized control logic of the combustion turbines are equivalent to maintenance and software upgrade activities. These activities would not create any more traffic above the existing background traffic. Therefore, the proposed project modifications would not affect traffic and transportation or require any changes to the existing Traffic and Transportation conditions of certification.

TRANSMISSION LINE SAFETY AND NUISANCE

The proposed modifications would not change the transmission line safety and nuisance conditions of certification. The implementation of the existing conditions of certification adopted in the Decision would ensure continued compliance with LORS.

TRANSMISSION SYSTEM ENGINEERING

The installation of the **proposed upgrades** ~~upgraded combustion system~~ includes installing a new hot gas ~~bypass~~ path and upgraded control system to the combustion turbine generators and would increase the capacity of the project from 585 MW to ~~635~~ **596** MW. The increase in

capacity can be reliably transmitted to the California Independent System Operator (California ISO)-controlled grid.

The California ISO Phase II Study indicates that the increased capacity can be reliably transmitted to the transmission grid at the Midway Substation and would not require additional transmission facilities that might have an impact on the physical environment, as required upgrades could be completed within the fence line of existing facilities. By continuing to comply with existing Conditions of Certification **TSE-1, TSE-2 and TSE-3**, the proposed installation of the upgraded combustion system modifications would not have a significant impact transmission system reliability and would comply with all applicable LORS.

VISUAL RESOURCES

Installation of the enhanced hardware and optimized control logic of the combustion turbines are equivalent to maintenance and software upgrade activities. The improvements are interior and therefore, the proposed project modifications would not affect visual resources or require any changes to the existing Visual Resources conditions of certification.

WASTE MANAGEMENT

No new waste streams will be created. Quantities of solid waste generated will not significantly change from ongoing operations. Therefore, the proposed project modifications would not affect waste management or require any changes to the existing Waste Management conditions of certification.

WORKER SAFETY AND FIRE PROTECTION

Existing Condition of Certification **WORKER SAFETY-1** covers worker health and safety requirements for construction activities, including activities to be performed to complete the proposed project modifications. By continuing to comply with existing conditions of certification **WORKER SAFETY-1**, the proposed installation of the upgraded combustion system modifications would not have a significant impact on worker health and safety and would comply with all applicable LORS.

CALENVIROSCREEN

Staff reviewed CalEnviroScreen 4.0 data to determine whether the United States census tract where the Sunrise Power Project is located (6029003304) is identified as a disadvantaged community. This science-based mapping tool is used by the California Environmental Protection Agency (CalEPA) to identify disadvantaged communities based on geographic, socioeconomic, public health, and environmental hazard criteria pursuant to Health and Safety Code section 39711 as enacted by Senate Bill 535 (De

León, Chapter 830, Statutes of 2012). The CalEnviroScreen 4.0 overall percentile score for this census tract is 81 and, thus, is identified as a disadvantaged community[1].

Staff's assessment of the proposed changes considered the potential impacts to the population within the disadvantaged community, including the environmental justice population within a six-mile radius of the Sunrise Power Project.

ENVIROMENTAL JUSTICE

Environmental Justice Figure 1 shows 2020 census blocks in the six-mile radius of the Sunrise Power Project with a minority population greater than or equal to 50 percent. The population in these census blocks represents an environmental justice (EJ) population based on race and ethnicity as defined in the United States Environmental Protection Agency's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. Staff conservatively obtains demographic data within a six-mile radius around a project site based on the parameters for dispersion modeling used in staff's air quality analysis. Air quality impacts are generally the type of project impacts that extend the furthest from a project site. Beyond a six-mile radius, air emissions have either settled out of the air column or mixed with surrounding air to the extent the potential impacts are less than significant. The area of potential impacts would not extend this far from the project site for most other technical areas included in staff's EJ analysis.

Based on California Department of Education data in the **Environmental Justice Table 1**, staff concluded that the percentage of those living in the Midway Elementary and Atascadero Unified school districts (in a six-mile radius of the project site) and enrolled in the free or reduced-price meal program are not larger than those in the reference geography. Thus, it is not considered an EJ population based on low income as defined in *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. **Environmental Justice – Figure 2** shows where the boundaries of the school district are in relation to the six-mile radius around the Sunrise Power Project site.

[1] The four categories of geographic areas identified by CalEPA as disadvantaged are: 1) Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0, 2) Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores, 3) Census tracts identified in the 2017 DAC designation, regardless of their scores in CalEnviroScreen 4.0, and 4) Lands under the control of federally recognized Tribes.
Source: CalEPA Final Designation of Disadvantaged Communities: May 2022
https://calepa.ca.gov/envjustice/ghginvest/

Environmental Justice Table 1
Low Income Data within the Project Area

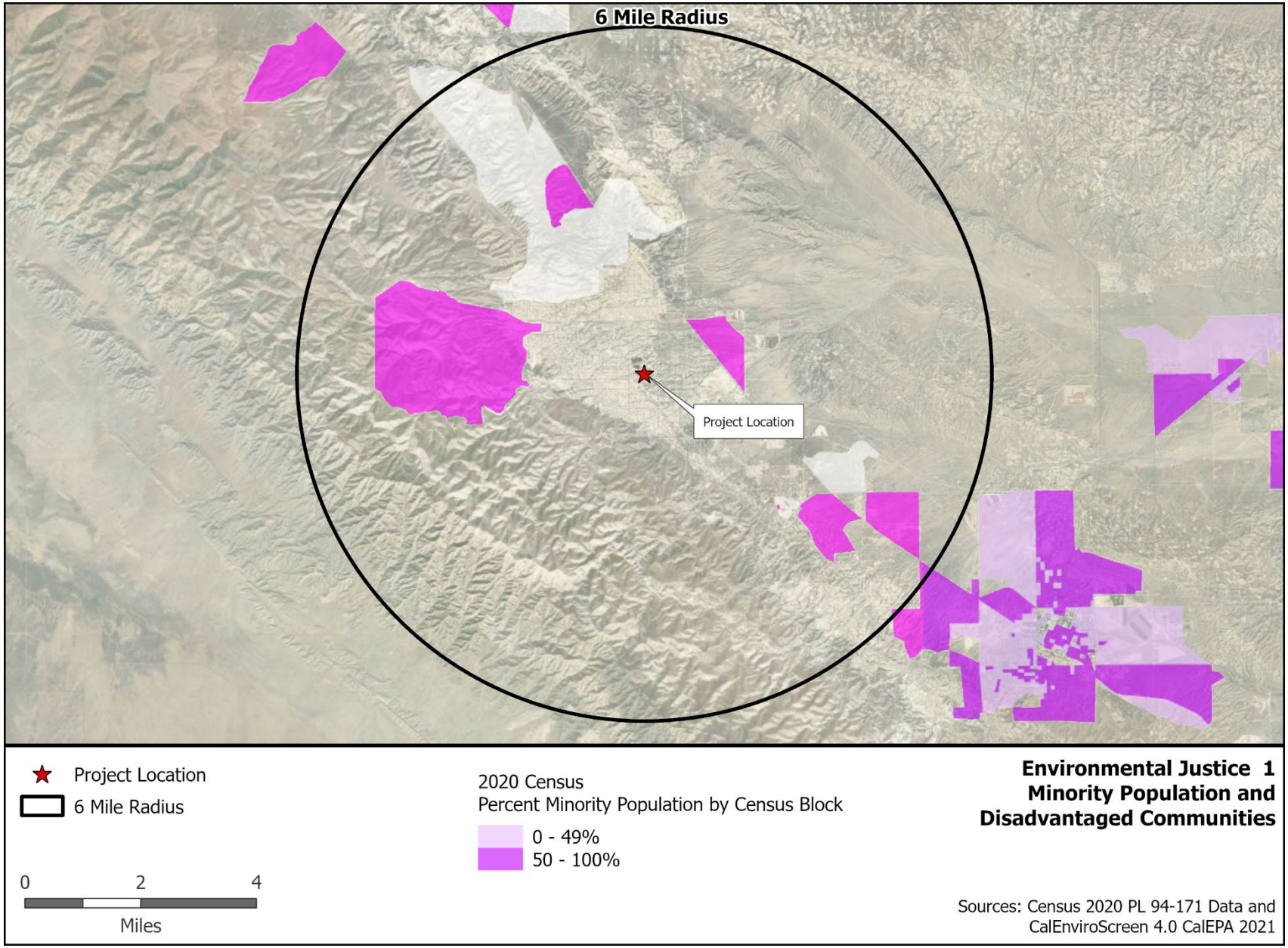
KERN COUNTY SCHOOL DISTRICT IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced-Price Meals	
Midway Elementary	64	27	42.2%
REFERENCE GEOGRAPHY			
Kern County	196,030	139,871	71.4%
SAN LUIS OBISPO SCHOOL DISTRICT IN SIX-MILE RADIUS	**Enrollment Used for Meals**	**Free or Reduced-Price Meals**	
Atascadero Unified	4,341	1,940	44.7%
REFERENCE GEOGRAPHY			
San Luis Obispo County	32,813	16,469	50.2%

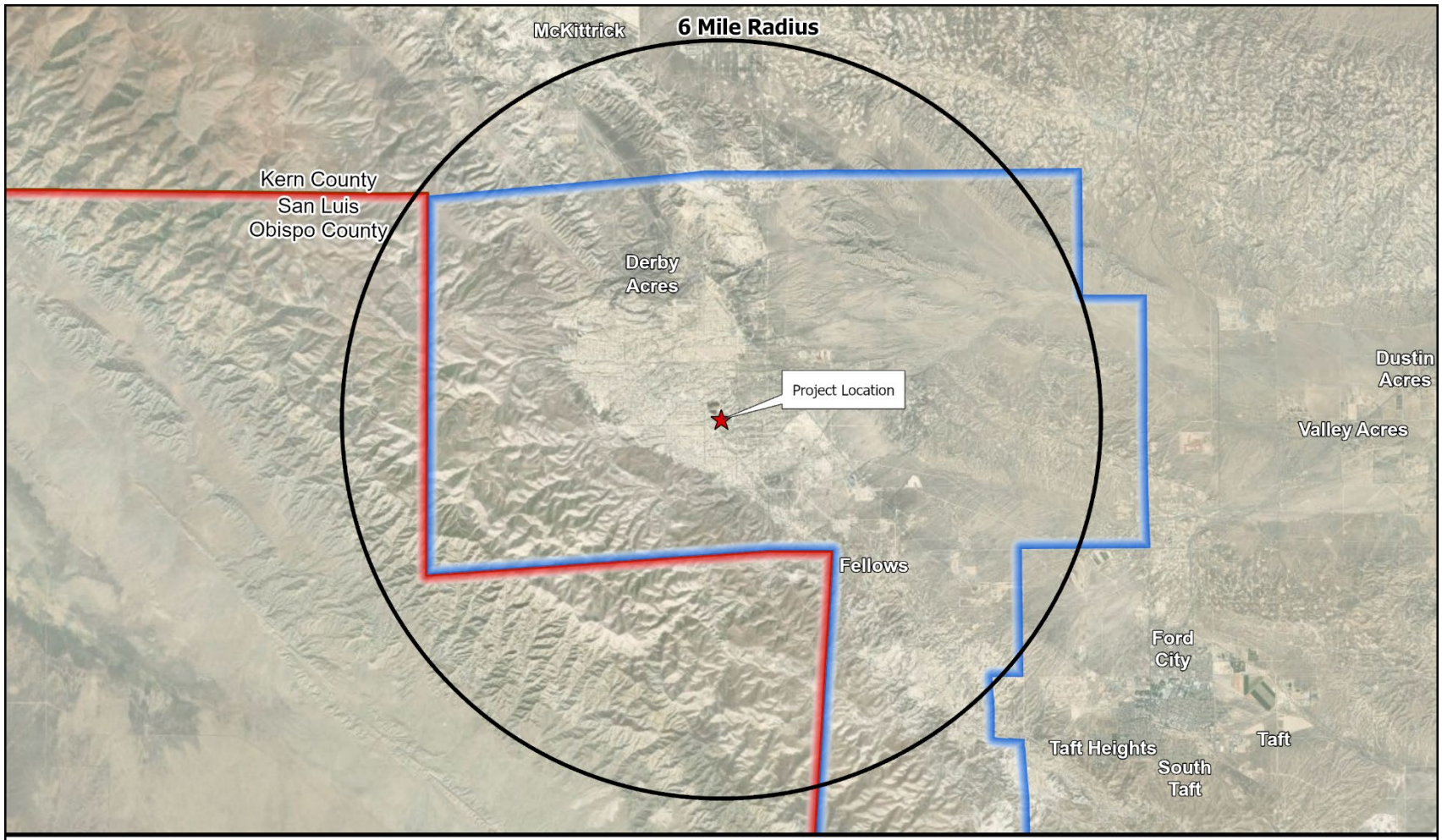
Source: CDE 2022. California Department of Education, DataQuest, Free or Reduced-Price Meals, District level data for the year 2021-2022, <http://dq.cde.ca.gov/dataquest/>.

The following technical areas (if affected) consider impacts to EJ populations: Air Quality, Cultural Resources (indigenous people), Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, and Worker Safety and Fire Protection.

Environmental Justice Conclusions

For this petition, the following technical areas consider impacts to EJ populations: Cultural Resources (indigenous people), Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, and Worker Safety and Fire Protection. For these technical areas, staff concludes that impacts would be less than significant, and, thus, would be less than significant on the EJ population represented in **Environmental Justice Figure 1**. In the Air Quality analysis, staff proposes new conditions of certification to mitigate potentially significant impacts on the environment. Staff has determined that by adopting the proposed new conditions of certification, the proposed project changes would not cause significant impacts for any population in the project's six-mile radius, including the EJ population. Impacts to the EJ population are less than significant.


6 Mile Radius
Project Location
Project Location
6 Mile Radius
0
2
4
Miles
2020 Census
Percent Minority Population by Census Block
0 - 49%
50 - 100%
Environmental Justice 1
Minority Population and
Disadvantaged Communities
Sources: Census 2020 PL 94-171 Data and
CalEnviroScreen 4.0 CalEPA 2021


McKittrick
6 Mile Radius
Kern County
San Luis
Obispo County
Derby
Acres
Project Location
Dustin
Acres
Valley Acres
Fellows
Ford
City
Taft Heights
Taft
South
Taft
Project Location
6 Mile Radius
School District
Atascadero Unified
Midway Elementary
Environmental Justice 2
Low Income Population
Note: Shaded areas have an EJ population
based on low income
Sources: TIGER Data, CDE 2022

CEC STAFF RECOMMENDATIONS AND CONCLUSIONS

Staff has reviewed the petition pursuant to California Code of Regulations, title 20, section 1769. Staff recommends the Commission approve the petition.

Consistent with California Code of Regulations, title 20, section 1769, staff has reviewed the petition for potential environmental effects and consistency with applicable LORS. Staff concludes that, with regard to the proposed changes to SPP (1) there is no possibility that the changes may have a significant effect on the environment, (2) the changes would not cause the project to fail to comply with any applicable LORS, and (3) the changes would not require a change to, or deletion of, any conditions of certification as adopted in the Decision or previous amendments to that decision, if any, except for those related to Air Quality. For the changes to the Air Quality conditions of certification in the Decision and consistent with California Code of Regulations, title 20, section 1769(a)(3)(B), in addition to the conclusions made above, staff concludes the modified SPP would increase a daily, quarterly, annual, or other emission limits, but with the modification of and addition of new Air Quality conditions of certification for consistency with the new Authority to Construct permit issued by the District, the effect on the environment would be less-than-significant.

Staff also concludes the findings specified in California Code of Regulations, title 20, section 1748(b) do not apply to the proposed changes.

Lastly, staff concludes the proposed changes do not meet any of the criteria requiring the production of subsequent or supplemental review pursuant to Public Resources Code section 21166.

Sunrise Power Project (98-AFC-04C)
Request to Amend Final Commission Decision

AIR QUALITY, PUBLIC HEALTH, AND GREENHOUSE GASES

Wenjun Qian, Ph.D., P.E.

INTRODUCTION AND SUMMARY

On April 12, 2021, Sunrise Power Company, LLC (project owner) submitted a post-certification petition with the California Energy Commission (CEC) to modify the Sunrise Power Project. The project owner proposes to install a new hot gas path (turbine section and combustion system) and an upgraded control system for the combustion turbine generators. These improvements will increase the power output and improve efficiency. The improved project would provide better baseload level support to the grid and may be dispatched more often for shorter durations to support changing renewable output. The petition also includes proposed modifications to Air Quality conditions of certification in the CEC's Final Decision (Decision) to match the current San Joaquin Valley Air Pollution Control District (District) permit requirements.

The existing Sunrise Power Project is a 585-megawatt (MW) nominally rated 2×1 combined cycle power facility. It includes two 160-MW (nominal) General Electric Frame 7FA natural gas-fired combustion turbine generators (CTG1 and CTG2), equipped with dry low nitrogen oxides (NOx [Dry Low NOx (DLN)]) combustors; two heat recovery steam generators with duct firing; one steam turbine generator; and selective catalytic reduction (SCR) and oxidation catalyst for emission control.

The owner submitted an application for an Authority to Construct (ATC) permit to the District on October 26, 2020. The District completed an analysis of the proposed project modifications on October 3, 2022 (District 2022). Staff reviewed the project owner's petition and the associated District analysis.

The proposed project improvement would increase the maximum fuel input, which would result in a small increase in hourly emission limits of sulfur oxides (SOx), NOx, volatile organic compounds (VOC), and carbon monoxide (CO) during normal operations and a minor daily increase in SOx emissions. Annual emissions of criteria pollutants would not increase. In this analysis, staff demonstrates that the air quality impacts of the project with the proposed modifications would be less than significant. The public health impacts of the project with proposed modifications would also be less than significant. The proposed project improvement would increase greenhouse gas emissions, but the increase would be less than significant.

To ensure the CEC's conditions of certification in the Decision match the current District permit requirements, the project owner proposed some changes in Air Quality conditions of certification in the petition. The CEC staff (staff) proposes further changes with renumbering of the conditions of certification and other minor modifications. The following summarizes all the proposed changes in Air Quality conditions of certification:

- Modification of the equipment description of the CTGs;
- Modification of emission limits in existing Conditions of Certification **AQ-9** (renumbered as **AQ-26** with lower sulfur content limit), **AQ-15** (renumbered as **AQ-37** with higher hourly emission limits), **AQ-16** (renumbered as **AQ-38** with lower daily emission limits for each CTG except for minor increase in SOx emission limit), **AQ-17** (renumbered as **AQ-40** with lower annual emission limits), and **AQ-50** (renumbered as **AQ-39** with lower daily emission limits for both CTGs except for minor increase in SOx emission limit);
- Addition of new Conditions of Certification **AQ-1** through **AQ-6**, **AQ-11** through **AQ-14**, **AQ-20** through **AQ-22**, **AQ-25**, **AQ-28**, **AQ-30**, **AQ-33**, **AQ-34**, **AQ-41**, **AQ-42**, **AQ-48**, **AQ-51**, **AQ-53**, **AQ-56** through **AQ-73**, **AQ-77** through **AQ-83**, and **AQ-89**;
- Deletion of reference to simple-cycle operation or the conversion from simple-cycle to combined-cycle operation in existing Conditions of Certification **AQ-14** (renumbered as **AQ-36**), **AQ-15** (renumbered as **AQ-37**), **AQ-16** (renumbered as **AQ-38**), and **AQ-17** (renumbered as **AQ-40**);
- Deletion of existing Conditions of Certification **AQ-2**, **AQ-18**, **AQ-19**, **AQ-22**, **AQ-28**, **AQ-32**, **AQ-41**, **AQ-42**, **AQ-44**, **AQ-46**, **AQ-52**, **AQ-53**, **AQ-54**, **AQ-61**, and **AQ-62**; and
- Renumbering and updating other conditions of certification with minor revisions to ensure CEC's conditions of certification in the Final Decision match current District permit conditions.

The modified project would comply with all laws, ordinances, regulations, and standards (LORS). Air quality, public health, and greenhouse gas impacts from the evaluated changes would be less than significant, including impacts to environmental justice populations. Therefore, there are no air quality, public health, or greenhouse gas environmental justice issues related to the evaluated facility modifications and no minority or low-income populations would be significantly or adversely impacted.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS COMPLIANCE

The CEC staff reviewed the petition and the District evaluation for consistency with all federal, state, and District LORS. The District issued draft ATCs on October 3, 2022, demonstrating that the proposed changes would comply with all applicable LORS. After addressing all comments made during the 30-day public notice and the 45-day United States Environmental Protection Agency (U.S. EPA) comment periods, the District intends to issue the ATCs with Certificates of Conformity. Prior to operating with modifications authorized by the ATCs, the owner is required to submit an application to the District to modify the Title V permit as an administrative amendment (District 2022).

Air Quality Table 1 includes a summary of the air quality LORS relevant to the proposed changes. **Air Quality Table 1** in this analysis is not intended to be

comprehensive of all LORS applicable to the facility. The conditions of certification in the Final Commission Decision and amendments thereafter ensure that the facility would remain in compliance with all LORS.

Air Quality Table 1
Laws, Ordinances, Regulations, and Standards (LORS)

Applicable LORS	Description	Compliance
State	**California Air Resources Board**	
California Health & Safety Code 42301.6 (School Notice)	It requires public notification prior to approving an application for permit to construct or modify a source that emits hazardous air emissions if the source is located within 1,000 feet of the outer boundary of a school.	The facility is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, a school notice is not required.
Local	**San Joaquin Valley Air Pollution Control District**	
Regulation I – General Provisions Rule 1080 Stack Monitoring	This rule grants the Air Pollution Control Officer (APCO) the authority to request the installation, use maintenance, and inspection of continuous monitoring equipment, and specifies performance standards for the equipment and administrative requirements for record keeping, reporting, and notification.	The facility is equipped with operational continuous emission monitoring system (CEMS), and provisions contained in the operating permits are consistent with the requirements of this rule. Therefore, ongoing compliance with this rule is expected.
Regulation I – General Provisions Rule 1081 Source Sampling	This rule requires adequate and safe facilities for using in sampling to determine compliance with emissions limits and specifies methods and procedures for source testing and sample collection, and compliance determination.	The current permit conditions are consistent with the requirements of this rule. Ongoing compliance with this rule is expected.
Regulation II – Permits Rule 2201 New and Modified Stationary Source Review Rule	This rule applies to all new stationary sources and all modifications to existing stationary sources which are subject to the District permit requirements and after construction emit or may emit one or more affected pollutant.	The proposed modifications constitute a SB 288 Major Modification for NOx and PM10 emissions; therefore, Best Available Control Technology (BACT) is triggered for NOx and PM10 and has been satisfied. District offsets are triggered but not required for any criteria pollutant under New Source Review (NSR). The proposed modifications do not trigger a Federal Major Modification or New Major Source requirements and federal offsets are not required for the proposed modifications. Public noticing is required for the proposed modifications for SB 288 Major Modification purposes. Ambient Air Quality Analysis (AAQA) is required for the purpose of determining whether a new or modified Stationary Source will cause or make worse

Applicable LORS	Description	Compliance
		violation of an air quality standard. The District conducted the required analysis. CEC staff also performed an independent analysis and showed that the air quality impacts of the project with proposed modifications would be less than significant (as discussed in more detail below).
Regulation II – Permits Rule 2410 – Prevention of Significant Deterioration (PSD)	This rule applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment.	The proposed modifications would not result in a significant net emissions increase of an air contaminant for which the area is designated attainment. Therefore, Rule 2410 is not applicable and no further analysis is required.
Regulation II – Permits Rule 2520 Federally Mandated Operating Permits	This rule provides administrative mechanism for permit issuance as well as compliance requirements associated with the Federally Mandated Operating Permits.	This facility is subject to this rule and has received their Title V Operating Permit. The proposed modifications are considered a minor permit modification under Rule 2520. The owner has applied for a Certificate of Conformity and the District has forwarded to U.S. EPA, for a 45-day review period, the application review which includes the proposed modified Title V permit [i.e. proposed ATC(s)] and the compliance certification form which demonstrates compliance with the minor permit modification requirements. The facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected.
Regulation II – Permits Rule 2540 Acid Rain Program	This rule incorporates the Acid Rain Standards from Part 72, Title 40, Code of Federal Regulations (CFR).	The CTGs are subject to the acid rain program that is implemented through the Title V operating permit. The acid rain program requirements for this facility are monitoring of the NOx and SOx emissions and SOx allowances (from a national SOx allowance bank) as well as the use of a NOx CEM. The facility currently complies with the requirements of the rule. Continued compliance with this rule is expected.
Regulation IV – Prohibitions Rule 4001 New Source Performance Standards (NSPS)	This rule incorporates NSPS from Part 60, Chapter 1, Title 40, CFR; and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.	The CTGs at the existing power plant complied with Subpart GG which limits NOx and sulfur from stationary gas turbines. Subpart GG would not apply after the CTG upgrades and Subpart KKKK would apply since the modifications would commence after

Applicable LORS	Description	Compliance
		February 18, 2005. The NOx emissions of the CTGs would continue to be no more than 2.0 parts per million by volume on a dry basis (ppmvd) at 15 percent oxygen (O_2). The turbines and duct burners combust pipeline quality natural gas. Continued compliance with the NSPS NOx and SOx limits is expected. Continued compliance with NSPS continuously monitoring requirement is also expected. The District modified some permit condition wording to reference the correct 40 CFR sections. Staff proposes to incorporate these changes in the conditions of certification to match the District permit conditions (see details below).
Regulation IV – Prohibitions Rule 4101 Visible Emissions	This rule states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).	As the CTGs are fired solely on natural gas, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity. Also, based on past inspections of the facility, continued compliance is expected.
Regulation IV – Prohibitions Rule 4102 Nuisance	This rule prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public.	The facility is located in a sparsely populated oilfield. Nuisance complaints are not expected from properly operated combustion equipment fired exclusively on low-sulfur natural gas; therefore, operation of the CTGs is not expected to result in nuisance complaints.
Regulation IV – Prohibitions Rule 4201 Particulate Matter Concentration	Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot (gr/dscf).	Particulate matter (PM) emissions for the CTGs are less than 0.1 gr/dscf. Continued compliance is expected.
Regulation IV – Prohibitions Rule 4703 Stationary Gas Turbines	The provisions of this rule apply to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0.	The modified project would continue to meet the 2.0 ppmvd NOx at 15 percent O_2 and 4 ppmv CO at 15 percent O_2, which are well below the limits set in Rule 4703. Continued compliance is expected.
Regulation IV – Prohibitions Rule 4801 Sulfur Compounds	Rule 4801 limits sulfur compound emissions to 0.2 percent (2,000 ppm) dry volume.	The SOx emission concentration of the CTGs are calculated to be 11 ppmvd at 15 percent O_2 with the fuel sulfur content of 0.25 gr/100 scf. Therefore, SOx emissions are not expected to exceed 2,000 ppmvd, and continued compliance with this rule is expected.

Applicable LORS	Description	Compliance
District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources	This policy specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.	The District performed an analysis pursuant to the policy to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. The District analysis shows that the public health impacts of the modified project would be less than significant.

ANALYSIS

Sunrise is proposing to install enhanced hardware to the **compressor**, combustor and turbine **sections** and optimize the control logic of the gas turbines **with PSM Autotune software in conjunction with the existing GE Mark VI control system**. The proposed project upgrades include ~~a~~ new **compressor blading on 4 stages**, combustion system **transition pieces, with ability to increase firing temperature or maintain current firing temperature,** ~~with higher gas turbine firing temperatures and a~~ new turbine section **nozzles on stage 1 & 2**, resulting in increased MW output and improved efficiency made possible by improved cooling, sealing enhancements and advanced materials. **All remaining components, including combustors, will be consistent with the current GE design.**

Air Quality

Construction

Installation of the equipment would take no longer than a maintenance outage and would require minimal construction equipment for assembly. Staff expects the emissions and impacts during construction would be less than significant with existing Conditions of Certification **AQ-C1** to **AQ-C3**.

Commissioning

The upgraded CTGs will require a period of commissioning. The commissioning period is expected to be about 80 hours for each CTG. In addition, there may be 6 months between commissioning of the two CTGs. The commissioning is expected to occur in three phases. The first phase will be "break-in" and should take about 24 hours. The next phase is tuning and is expected to require another 24 hours. The remainder of the commissioning time will be for testing. The project owner expects testing will be at normal operation but may include a number of stops and starts.

It is expected that emissions during commissioning of the upgraded CTGs would be less than the emissions during the commissioning of the original units. The original commissioning would have been with new SCR systems that require tuning and break-in and likely operation without control in place. The new units will have controls in-place and the commissioning time will be shorter for break-in and tuning. The project owner will request a short-term variance for the commissioning period from the District as needed.

Operation

The ~~replacement~~ DLN combustion system **will maintain** ~~would achieve~~ a NOx concentration of 9.0 parts per million by volume on a dry basis (ppmvd) at 15 percent oxygen (O_2) compared to the current Original Equipment Manufacturer (OEM) guarantee of **9** ~~15~~ ppmvd at 15 percent O_2. These emission concentrations are prior to the SCR. The SCR reduces the NOx emissions to no more than 2.0 ppmvd at 15 percent O_2, which is the BACT limit for NOx emission concentration and would remain the same after the proposed modifications. In addition, the modified project would continue to meet the BACT limits of 4.0 ppmvd at 15 percent O_2 for CO, 2.0 ppmvd at 15 percent O_2 for VOC, and ammonia slip limit of 10 ppmvd at 15 percent O_2, all of which are limited by existing Condition of Certification **AQ-15** (proposed to be renumbered as **AQ-37**). The SOx emissions would continue to be limited by the sulfur content of the natural gas, which would be updated from 0.75 grains per 100 dry standard cubic feet (gr/100 dscf) to 0.25 gr/100 dscf in existing Condition of Certification **AQ-9** (proposed to be renumbered as **AQ-26**) to match current District permit limit.

The owner expects that the proposed project improvement would increase fuel input, which would result in a small increase in maximum hourly emissions of SOx, NOx, VOC and CO during normal operations. The emission limits for particulate matter of 10 micrometers or less in diameter (PM10) and particulate matter of 2.5 micrometers and smaller in diameter (PM2.5) would not increase. **Air Quality Table 2** shows the comparison of the maximum hourly emission limits in pounds per hour (lbs/hr) during normal operation with duct firing before and after the proposed modifications. As discussed in more detail below, the ambient air quality impacts of the project with proposed modifications would be less than significant.

The pre-modification emissions are limited by existing Condition of Certification **AQ-15** (proposed to be renumbered as **AQ-37**). The owner proposes to change the emission limits in the condition for the proposed project improvement. The District revised these emission limits in permit condition 37. Staff proposes the same changes in existing Condition of Certification **AQ-15** (proposed to be renumbered as **AQ-37**) to match the District permit condition 37.

Air Quality Table 2
Maximum Hourly Emission Limits during Normal Operation with Duct Firing from Each Turbine (lbs/hr)

	PM10/PM2.5	SOx	NOx	VOC	CO
Pre-Modification Emissions	17.8	1.55	15.96	5.51	19.22
Post-Modification Emissions	17.8	1.58	16.74	5.84	20.38
Change in Emissions	0	0.03	0.8	0.3	1.2

Sources: Sunrise 2021, District 2022, and CEC staff analysis

Even though the emission limits during normal operations would increase slightly as shown in **Air Quality Table 2**, the worst-case hourly emissions for NOx, VOC, and CO would still occur during startups/shutdowns. **Air Quality Table 3** shows the comparison of the worst-case hourly emissions during startups/shutdowns before and

after the proposed modifications. The pre-modification worst-case hourly emissions and impacts were analyzed in the 2001 staff analysis of conversion from simple-cycle to combined-cycle operations (CEC 2001). The NOx and CO emissions during startups/shutdowns are limited in existing Condition of Certification **AQ-14**. **Air Quality Table 3** shows that the owner estimated worst-case hourly post-modification emissions during startups/shutdowns would be lower than or equal to the pre-modification emissions analyzed previously, except for the SOx emissions. As discussed in more detail below, the SO_2 impacts of the project with proposed modifications would be less than significant.

The District kept the NOx and CO emission limits during startups/shutdowns in permit condition 36. Therefore, staff proposes to keep the same limits in existing Condition of Certification **AQ-14** (proposed to be renumbered as **AQ-36**).

Air Quality Table 3
Worst-Case Hourly Emissions during Startups/Shutdowns from Each Combustion Turbine (lbs/hr)

	PM10/PM2.5	SOx	NOx	VOC	CO
Pre-Modification Emissions	40	1.55	350	40	790
Post-Modification Emissions	40.0	1.67	115	30	329
Change in Emissions	0	0.12	-235	-10	-461

Sources: CEC 2001, Sunrise 2021, District 2022, and CEC staff analysis

Air Quality Table 4 shows the comparison of the maximum daily emission limits before and after the proposed modifications. The proposed modifications would result in a minor daily increase in emissions of SOx due to the increased fuel consumption of the gas turbines. The daily emissions limits for PM10/PM2.5, NOx, VOC, and CO in these conditions would decrease.

As discussed in more detail below, the SO2 impacts of the project with proposed modifications would be less than significant. The project owner proposes to increase the daily limits for SOx emissions in existing Condition of Certification **AQ-16** (proposed to be renumbered as **AQ-38**) for single turbines and existing Condition of Certification **AQ-50** (proposed to be renumbered as **AQ-39**) for both turbines to be consistent with the District permit conditions 38 and 39. However, staff noticed that the District's draft ATC evaluation included a typographical error by showing the daily SOx emission limit for both turbines as 74.2 lbs/day in condition 39, which should be corrected to 74.8 lbs/day. Staff discussed this with the District and the District agreed to make the correction in the final ATC. Staff recommends the correct SOx emission limit of 74.8 lbs/day for both turbines in renumbered Condition of Certification **AQ-39**.

Air Quality Table 4
Maximum Daily Emission Limits (lbs/day)

	PM10/PM2.5	SOx	NOx	VOC	CO
	Each Combustion Turbine				
Pre-Modification Emissions	461.2	37.2	1,170.9	220.6	2,443.4
Post-Modification Emissions	432.0	37.4	1,127.3	211.5	2,301.8
Change in Emissions	-29.2	0.2	-43.6	-9.1	-141.6
	Both Combustion Turbines				
Pre-Modification Emissions	922.3	74.4	2,341.8	441.2	4,886.8
Post-Modification Emissions	863.9	74.8 [a]	2,254.5	423.1	4,604.5
Change in Emissions	-58.4	0.4	-87.3	-18.1	-282.3

Sources: Sunrise 2021, District 2022, and CEC staff analysis

Note: [a] Staff noticed that the District's draft ATC evaluation included a typographical error by showing the daily SOx emission limit for both turbines as 74.2 lbs/day, which should be corrected to 74.8 lbs/day. Staff discussed this with the District and the District agreed to make the correction in the final ATC. Staff recommends the correct SOx emission limit of 74.8 lbs/day for both turbines in renumbered Condition of Certification **AQ-39**.

Air Quality Table 5 shows the comparison of the maximum annual emission limits before and after the proposed modifications. The pre-modification annual emissions are limited in existing Condition of Certification **AQ-17** (proposed to be renumbered as **AQ-40**). **Air Quality Table 5** shows that the annual emission limits would decrease with the proposed modifications. Therefore, emission offsets are not recommended for the proposed modifications. In addition, to ensure that the Federal Major Modification Thresholds are not surpassed with the proposed modifications, the District added a new permit condition 30 to require tracking of annual emissions and compare to Projected Actual Emissions, which are below the maximum annual emissions limits shown in **Air Quality Table 5**. Staff proposes to add this condition as a new Condition of Certification **AQ-30** to match the District permit condition 30.

Air Quality Table 5
Maximum Annual Emission Limits from Both Turbines (lbs/year)

	PM10/PM2.5	SOx	NOx	VOC	CO
Pre-Modification Emissions	269,651	24,259	311,337	87,674	507,978
Post-Modification Emissions	269,442	23,434	311,197	87,606	505,211
Change in Emissions	-209	-825	-140	-68	-2,767

Sources: Sunrise 2021, District 2022

The District performed an ambient air quality analysis and concluded that the proposed modifications would not cause a violation of an air quality standard. However, the District only modeled the impacts due to the increments of hourly emissions for SOx, NOx, and CO during normal operation with duct firing (as shown in **Table 2** above), instead of the entire hourly emissions.

CEC staff performed an independent ambient air quality analysis with entire hourly emissions, not just the increments. As discussed above, the worst-case hourly SOx

emissions would increase to 1.67 lbs/hr for each combustion turbine, which would be during startups/shutdowns (as shown in **Table 3** above). Therefore, staff evaluated 1-hour SO_2 impacts with emission rate of 1.67 lbs/hr for each turbine to show compliance with 1-hour SO_2 ambient air quality standards. For 24-hour SO_2 impact analysis, staff used the daily emission rate of 37.4 lbs/day to show compliance with the 24-hour SO_2 ambient air quality standard.

Worst-case hourly, daily, and annual emissions for other criteria pollutants would not increase above those analyzed in the 2001 staff analysis. However, when the 2001 staff analysis was performed, the applicable 1-hour NO_2 California Ambient Air Quality Standard (CAAQS) was 470 micrograms per cubic meter of air ($\mu g/m^3$). Since then, the 1-hour NO_2 CAAQS has decreased to 339 $\mu g/m^3$. In addition, on January 22, 2010, the U.S. EPA established a new 1-hour primary National Ambient Air Quality Standard (NAAQS) for NO_2 at a level of 100 parts per billion (ppb) (or 188 $\mu g/m^3$), based on a 3-year average of the 98th percentile of the yearly distribution of 1-hour daily maximum concentrations. Even though worst-case hourly NOx emissions, which would be during startups/shutdowns, would not increase, CEC staff still performed an updated 1-hour NO_2 impacts analysis to show compliance with both the reduced 1-hour NO_2 CAAQS and the new 1-hour NO_2 NAAQS. CEC staff conservatively modeled the 1-hour NO_2 impacts with the worst-case hourly NOx emission rate of 350 lbs/hr for each CTG. This is consistent with the NOx emission limit of 700 lbs/hr for both CTGs during startups/shutdowns in existing Condition of Certification **AQ-14** (proposed to be renumbered as **AQ-36**), which would not change after the proposed modifications, even though the estimated hourly NOx emissions during startups/shutdowns would decrease (as shown in **Table 3** above).

CEC staff used the U.S. EPA preferred and recommended dispersion model, American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD [version 21112]) to perform the ambient air quality analysis. CEC staff used the exhaust parameters and meteorological files provided by the District and the emission rates described above. For the 1-hour NO_2 impacts analysis, staff used the Ambient Ratio Method Version 2 (ARM2) with an in-stack NO_2/NOx ratio of 0.5 based on U.S. EPA Guideline on Air Quality Models.

Air Quality Table 6 shows the results of staff's independent ambient air quality analysis. **Air Quality Table 6** shows that the project with the proposed modifications would not cause a violation of 1-hour NO_2, 1-hour SO_2 or 24-hour SO_2 ambient air quality standards. Therefore, the air quality impacts of the project with proposed modifications would be less than significant.

Air Quality Table 6
CEC Staff Ambient Air Quality Analysis Results

Pollutant	Averaging Period	Project Impact (µg/m³)	Background (µg/m³) [a]	Total Impact (µg/m³)	Limiting Standard (µg/m³)	Percent of Standard
NO_2	State 1-hour	113.05	126.05	239.10	339	71%
	Federal 1-hour [b]	72.05	92.19	164.24	188	87%
SO_2	State 1-hour	0.64	42.41	43.05	655	7%
	Federal 1-hour [c]	0.64	14.83	15.47	196	8%
	24-hour	0.13	7.07	7.19	105	7%

Sources: CEC 2001, U.S. EPA 2022, District 2022 with modeling files, CEC staff analysis

Notes:

[a] These are the worst-case background data for the most recent three years (2019-2021) for which data are available and complete. NO_2 background is from the Bakersfield-California Avenue monitoring station. SO_2 background is from the Fresno-Garland monitoring station, which is the only SO_2 monitoring station in the District.

[b] The federal 1-hour NO_2 standard is based on the 3-year average of the 98th percentile of the yearly distribution of 1-hour daily maximum concentrations. Staff combined the modeled 3-year average of the 98th percentile 1-hour daily maximum project impact with the 3-year average of the 98th percentile 1-hour daily maximum background to compute the total impact and compared it with the federal 1-hour NO_2 standard.

[c] The federal 1-hour SO_2 standard is based on the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations. For a simplified calculation, staff conservatively used the maximum 1-hour project impact with the 3-year average of the annual 99th percentile of the 1-hour daily maximum background to compute the total impact and compared it with the federal 1-hour SO_2 standard.

Public Health

Staff expects the public health impacts during construction would be less than significant due to limited construction activities and lack of nearby receptors.

The District performed an analysis pursuant to the District's Risk Management Policy for Permitting New and Modified Sources (District Policy APR 1905) to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. The District analysis shows that the public health impacts of the modified project would be less than significant. Staff reviewed the District's analysis and agrees with the conclusion.

Greenhouse Gases

Staff expects the greenhouse gas (GHG) impacts during construction would be less than significant due to limited construction activities.

District Rule 2410 references the applicable version of 40 CFR Part 52.21 – Prevention of Significant Deterioration (PSD). Beginning January 2, 2011, the pollutant GHG shall be subject to regulation if the source is otherwise subject to PSD (for another regulated NSR pollutant) and the source has a GHG potential to emit (PTE) equal to or greater

than 75,000 tons per year (tpy) carbon dioxide equivalent (CO_2e). Beginning July 1, 2011, in addition to the above provisions, the pollutant GHGs shall also be subject to regulation if the GHG PTE from the new source would be equal to or greater than 100,000 tpy CO_2e basis and equal to or greater than the applicable major source threshold on a mass basis. The owner calculated that the worst-case increase in GHG emissions would be less than 24,000 metric tons per year or 26,000 tons per year. Therefore, the proposed modifications would not be subject to PSD for GHGs. In addition, the proposed modifications would improve the thermal efficiency of the existing combustion turbines, and this is considered a GHG BACT. The improved project would provide better baseload level support to the grid and may be dispatched more often for shorter durations to support changing renewable output.

To address GHG emissions impacts for stationary source projects, District established policies *APR 2005 – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency* and *APR 2025 – CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation*. Under District policy APR 2005, the District's determination of significance of project specific GHG emissions is founded on the principal that projects with GHG emission reductions consistent with AB 32 emission reduction targets are considered to have a less than significant impact on global climate change. Under District policy APR 2025, the District determined that GHG emissions increases that are covered under Cap-and-Trade regulation cannot constitute significant increases under CEQA. The existing Sunrise Power Project is subject to Cap-and-Trade as an electricity generating facility under California Code of Regulation, Title 17, Section 95811. Under District policy APR 2025, all GHG emission increases resulting from the combustion of fuel are mitigated under Cap-and-Trade and are determined to be less than significant. Therefore, the GHG emission increases due to the proposed modifications would be less than significant.

Proposed Changes to the Conditions of Certification

The project owner proposes to update the conditions of certification to match the current District air permit requirements for the proposed project modifications. CEC staff proposes further changes with renumbering of the conditions of certification and other minor modifications to ensure the conditions of certification in the Final Decision match the current District permit requirements. **Air Quality Table 7** summarizes the mapping of CEC conditions of certification and District permit conditions with proposed modifications and justification.

Air Quality Table 7
Mapping of Conditions of Certification and District Permit Conditions with Proposed Modifications and Justification

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-C1	None	None.
AQ-C2	None	None.
AQ-C3	None	None.
AQ-1	1	The project owner proposes to add a new condition of certification to include several District permits conditions for compliant dormant emission units. However, the conditions the project owner proposes to add only include District permit conditions 1, 2, and 3. In addition to these conditions, staff proposes to add District permit conditions 4, 5 and 6, which are related to source testing and record keeping requirements once the dormant emission units recommence operation. Staff proposes to add these conditions as new Conditions of Certification **AQ-1** through **AQ-6**.
AQ-2	2	
AQ-3	3	
AQ-4	4	
AQ-5	5	
AQ-6	6	
AQ-7	7	Staff proposes to renumber existing **AQ-5** as **AQ-7** and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 7.
AQ-8	8	Staff proposes to renumber existing **AQ-6** as **AQ-8** and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 8.
AQ-9	9	Staff proposes to renumber existing **AQ-7** as **AQ-9** with minor revisions in the condition to ensure CEC's condition of certification in the Final Decision matches District permit condition 9 requirement for continuous emissions monitors.
AQ-10	10	Staff proposes to renumber existing **AQ-60** as **AQ-10**, add the applicable CFR and the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 10.
AQ-11	11	Staff proposes to add District permit conditions 11 and 12 as new Conditions of Certification **AQ-11** and **AQ-12** regarding CEM data reporting through the polling system.
AQ-12	12	
AQ-13	13	Staff proposes to add District permit condition 13 as a new Condition of Certification **AQ-13** regarding compliance testing and sampling procedures.
AQ-14	14	Staff proposes to add District permit condition 14 as a new Condition of Certification **AQ-14** regarding CEM cycling times.
AQ-15	15	Staff proposes to renumber existing **AQ-8** as **AQ-15**. The District permit condition 15 includes more requirements regarding the location of the sampling ports. Staff proposes to add these requirements in the condition to ensure the CEC's condition of certification in the Final Decision matches District permit requirement.
AQ-16	16	Staff proposes to renumber existing **AQ-34** as **AQ-16** and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 16.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-17	17	Staff proposes to renumber existing **AQ-38** as **AQ-17** with minor revisions to ensure CEC's condition of certification in the Final Decision matches District permit condition 17 requirement regarding the timing for audits of continuous emission monitors.
AQ-18	18	Staff proposes to renumber existing **AQ-39** as **AQ-18**. The project owner proposes to replace the condition with District permit condition 72. However, staff proposes to revise existing **AQ-39** (renumbered as **AQ-18**) to match District permit condition 18 regarding relative accuracy test audit requirement since these two conditions are similar. Staff also proposes to add the District permit condition 72 as a new Condition of Certification **AQ-72** as described below.
AQ-19	19	Staff proposes to renumber existing **AQ-40** as **AQ-19**. The project owner proposes to update the condition to match the quarterly reports requirements in the District permit condition 19. Staff agrees.
AQ-20	20	Staff proposes to add District permit condition 20 as a new Condition of Certification **AQ-20** regarding excess emissions definition and calculation.
AQ-21	21	Staff proposes to add District permit conditions 21 and 22 as new Conditions of Certification **AQ-21** and **AQ-22** regarding reporting of NOx excess emissions and monitor downtime. The District draft ATC condition 21 included a typographical error by showing the outdated reference to 40 CFR Subpart GG section 60.334, which should be updated to 40 CFR Subpart KKKK section 60.4380. The District is aware of the error and would make the correction in the final ATC.
AQ-22	22	
AQ-23	23	Staff proposes to renumber existing **AQ-45** as **AQ-23**, make minor revisions in wording, and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 23.
AQ-24	24	Staff proposes to renumber existing **AQ-47** as **AQ-24**, make minor revisions in wording, and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 24.
AQ-25	25	Staff proposes to add District permit condition 25 as a new Condition of Certification **AQ-25** limiting the particulate matter emission to 0.1 gr/dscf. As stated above, continued compliance with the limit is expected.
AQ-26	26	Staff proposes to renumber existing **AQ-9** as **AQ-26**. The project owner proposes to update the condition to match the current sulfur content limit of 0.25 gr/100 dscf, decreased from 0.75 gr/100 dscf, in the District permit. The project owner also proposes to update the applicable rules and regulations. Staff agrees.
AQ-27	27	Staff proposes to renumber existing **AQ-24** as **AQ-27** and revise the condition to match the current natural gas sulfur content compliance demonstration requirement in District permit condition 27.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-28	28	Staff proposes to add District permit condition 28 as a new Condition of Certification **AQ-28** limiting the sulfur compound emission to 0.015 percent and 0.06 pound per Million British Thermal Units (lb/MMBtu) per 40 CFR Subpart KKKK. Continued compliance with the limit is expected with the use of pipeline quality natural gas.
AQ-29	29	Staff proposes to renumber existing **AQ-10** as **AQ-29**, add more applicable rules, and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 29.
AQ-30	30	District added a new permit condition 30 to track annual emissions after the proposed modifications and compare to Projected Actual Emissions (PAE) values. Staff proposes to add the new District permit condition 30 as a new Condition of Certification **AQ-30**.
AQ-31	31	Staff proposes to renumber existing **AQ-63** as **AQ-31** with minor revisions to match District permit condition 31.
AQ-32	32	Staff proposes to renumber existing **AQ-64** as **AQ-32** with minor revisions to match District permit condition 32.
AQ-33	33	Staff proposes to add District permit condition 33 as a new Condition of Certification **AQ-33** regarding test methods for the heating values of the fuel.
AQ-34	34	Staff proposes to add District permit condition 34 as a new Condition of Certification **AQ-34**, which requires compliance demonstration with auxiliary burner on and off.
AQ-35	35	Staff proposes to renumber existing **AQ-48** as **AQ-35** and make minor modification in the language regarding ammonia injection timing to match the District permit condition 35.
AQ-36	36	Staff proposes to renumber existing **AQ-14** as **AQ-36**. Staff proposes to delete the emission limits for simple-cycle operation in the condition since the conversion from simple-cycle operation to combined-cycle operation was completed previously and the emission limits during simple-cycle operation do not apply anymore. Staff also proposes other minor revisions in the condition to ensure the CEC's condition of certification in the Final Decision matches District permit condition 36.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-37	37	Staff proposes to renumber existing **AQ-15** as **AQ-37**. As discussed in more detail in the text above, the proposed modifications would result in a small increase in hourly emissions of SOx, NOx, VOC, and CO during normal operations. The owner proposes to change the emission limits in the condition for the proposed modifications. The District and CEC staff have demonstrated that the air quality impacts of the project with proposed modifications would be less than significant. Staff agrees with the proposed changes in the condition. Staff also proposes to delete the emission limits for simple-cycle operation in the condition since the conversion from simple-cycle operation to combined-cycle operation was completed previously and the emission limits during simple-cycle operation do not apply anymore. Staff also proposes minor revisions in the condition to ensure the CEC's condition of certification in the Final Decision matches District permit condition 37. In addition, staff proposes to make minor modifications to the last paragraph of the condition and move it to a new Condition of Certification **AQ-41** to match the District permit condition 41.
AQ-38	38	Staff proposes to renumber existing **AQ-16** as **AQ-38**. As discussed in more detail above, the daily emission limits for single turbines in District permit condition 38 would decrease except for a minor increase in SOx emission limit. Staff proposes to change the emission limits in the condition to match District permit condition 38. Staff also proposes to delete the emission limits for simple-cycle operation in the condition since the conversion from simple-cycle operation to combined-cycle operation was completed previously and the emission limits during simple-cycle operation do not apply anymore. Staff also proposes minor revisions in the condition to ensure the CEC's condition of certification in the Final Decision matches District permit condition 38. Staff also proposes to move the last paragraph of the condition to a new Condition of Certification **AQ-42** to match the District permit condition 42.
AQ-39	39	Staff proposes to renumber existing **AQ-50** as **AQ-39**. As discussed in more detail above, the daily emission limits for both turbines in District permit condition 39 would decrease except for a minor increase in SOx emission limit. Staff proposes to change the emission limits in the condition to match District permit condition 39, with the correction of a typographical error in the SOx emission limit. Staff also proposes minor revisions in the condition to ensure the CEC's condition of certification in the Final Decision matches District permit condition 39.
AQ-40	40	Staff proposes to renumber existing **AQ-17** as **AQ-40**. Staff proposes to delete the emission limits and requirements for the simple-cycle operation in the condition since the conversion from simple-cycle operation to combined-cycle operation was completed previously and the emission limits during simple-cycle operation do not apply anymore. Staff also proposes to reduce the annual emission limits and other minor revisions in the condition to match District permit condition 40. Staff also proposes to make minor modifications to the protocol

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
		paragraph of the condition and move it to a new Condition of Certification **AQ-42** to match the District permit condition 42.
AQ-41	41	As described above, staff proposes to add a new Condition of Certification **AQ-41** to include the last paragraph of existing **AQ-15** with minor modifications to match the District permit condition 41.
AQ-42	42	As described above, staff proposes to add a new Condition of Certification **AQ-42** to include the protocol paragraphs of existing **AQ-16** and existing **AQ-17** with minor modifications to match the District permit condition 42.
AQ-43	43	Staff proposes to renumber existing **AQ-51** as **AQ-43** and make minor modifications in the condition to match the District permit condition 43.
AQ-44	44	Staff proposes to renumber existing **AQ-20** as **AQ-44**. The project owner proposes to update the condition to ensure the CEC's condition of certification in the Final Decision matches more detailed requirements for source testing in the District permit condition 44. Staff agrees. The project owner also proposes to replace existing **AQ-22** with the updated renumbered condition **AQ-44** since the PM10 source testing requirement specified in existing **AQ-22** is now included in the updated renumbered condition **AQ-44**. Staff agrees and proposes to delete existing **AQ-22**.
AQ-45	45	Staff proposes to renumber existing **AQ-23** as **AQ-45**. The project owner proposes to update the condition to ensure the CEC's condition of certification in the Final Decision matches the startup source testing requirements in the District permit condition 45. Staff agrees.
AQ-46	46	Staff proposes to renumber existing **AQ-25** as **AQ-46**. Staff proposes to update the condition to ensure the CEC's condition of certification in the Final Decision matches the source testing notification requirement in the District permit condition 46.
AQ-47	47	Staff proposes to renumber existing **AQ-27** as **AQ-47**. The project owner proposes to update the condition to match the test methods for PM10, ammonia, and fuel gas sulfur content specified in District permit condition 47. Staff agrees.
AQ-48	48	Staff proposes to add District permit condition 48 as a new Condition of Certification **AQ-48** regarding averaging of CEM system results.
AQ-49	49	Staff proposes to renumber existing **AQ-29** as **AQ-49**. The project owner proposes to update the condition to match the records keeping requirements in the District permit condition 49. Staff agrees.
AQ-50	50	Staff proposes to renumber existing **AQ-30** as **AQ-50**, make minor revisions in wording, and add the statement saying the condition is federally enforceable through Title V Permit to match District permit condition 50.
AQ-51	51	Staff proposes to add District permit condition 51 as a new Condition of Certification **AQ-51** regarding submittal of data upon written notice from the APCO.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-52	52	Staff proposes to renumber existing **AQ-31** as **AQ-52**. The project owner proposes to update the condition to match the records keeping requirements in the District permit condition 52. Staff agrees. The project owner also proposes to replace existing **AQ-32** with the updated renumbered condition **AQ-52** since the records keeping requirements specified in the original **AQ-32** is now included in the updated renumbered condition **AQ-52**. Staff agrees and proposes to delete existing **AQ-32**.
AQ-53	53	Staff proposes to add District permit condition 53 as a new Condition of Certification **AQ-53** allowing APCO or an authorized representative to inspect the monitoring devices.
AQ-54	54	Staff proposes to renumber existing **AQ-65** as **AQ-54** with minor revisions to match District permit condition 54.
AQ-55	55	Staff proposes to renumber existing **AQ-33** as **AQ-55** and add more applicable rules to match District permit condition 55.
AQ-56	56	Staff proposes to add District permit condition 56 as a new Condition of Certification **AQ-56** requiring compliance with monitoring requirements in 40 CFR 75.
AQ-57	57	Staff proposes to add District permit conditions 57 through 65 as new Conditions of Certification **AQ-57** through **AQ-65** requiring compliance with Acid Rain program and Sulfur Dioxide Allowance System.
AQ-58	58	
AQ-59	59	
AQ-60	60	
AQ-61	61	
AQ-62	62	
AQ-63	63	
AQ-64	64	
AQ-65	65	
AQ-66	66	Staff proposes to add District permit conditions 66 and 67 as new Conditions of Certification **AQ-66** and **AQ-67** regarding offset requirements and penalty if there are excess emissions in any calendar year.
AQ-67	67	
AQ-68	68	Staff proposes to add District permit condition 68 as a new Condition of Certification **AQ-68** regarding record keeping of the certificate of representation.
AQ-69	69	Staff proposes to add District permit condition 69 as a new Condition of Certification **AQ-69** regarding record keeping of emissions monitoring information and compliance documents for the Acid Rain Program.
AQ-70	70	Staff proposes to add District permit condition 70 as a new Condition of Certification **AQ-70**, which requires submittal of reports and compliance certifications under the Acid Rain Program.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
AQ-71	71	Staff proposes to add District permit conditions 71 through 73 as new Conditions of Certification **AQ-71** through **AQ-73** stating that compliance with the Title V permit conditions is deemed compliance with other various requirements.
AQ-72	72	
AQ-73	73	
AQ-74	1 (facility-wide)	Staff proposes to renumber existing **AQ-35** as **AQ-74** and add more applicable rules to match current District facility-wide permit condition 1.
AQ-75	2 (facility-wide)	Staff proposes to renumber existing **AQ-36** as **AQ-75** and add more applicable rules to match current District facility-wide permit condition 2.
AQ-76	41 (facility-wide)	Staff proposes to renumber existing **AQ-1** as **AQ-76**. The existing **AQ-52** (applicable to the cooling tower) is identical to existing **AQ-1**. Staff proposes to delete existing **AQ-52** since the current District permit for the cooling tower does not include this condition.
AQ-77	1 (cooling tower)	Staff proposes to add the current District cooling tower permit conditions for compliant dormant emission units as new Conditions of Certification **AQ-77** through **AQ-82**.
AQ-78	2 (cooling tower)	
AQ-79	3 (cooling tower)	
AQ-80	4 (cooling tower)	
AQ-81	5 (cooling tower)	
AQ-82	6 (cooling tower)	
AQ-83	7 (cooling tower)	Staff proposes to add the current District cooling tower permit condition 7 as a new Condition of Certification **AQ-83** limiting PM emission concentration to 0.1 gr/dscf for the cooling tower. Continued compliance is expected.
AQ-84	8 (cooling tower)	Staff proposes to renumber existing **AQ-55** through **AQ-58** as **AQ-84** through **AQ-87** and make minor revisions to the applicable rules to match the current District permit for the cooling tower.
AQ-85	9 (cooling tower)	
AQ-86	10 (cooling tower)	
AQ-87	11 (cooling tower)	
AQ-88	12 (cooling tower)	Staff proposes to renumber existing **AQ-59** as **AQ-88** and remove the reference to the initial circulating water sample analysis because it was completed previously.
AQ-89	13 (cooling tower)	Staff proposes to add the current District cooling tower permit condition 13 for the cooling tower as a new Condition of Certification **AQ-89** regarding record keeping for the cooling tower.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
None	None	Staff proposes to delete existing **AQ-2**. It requires the owner to submit continuous emission monitor design, installation and operational details to the District 30 days prior to construction, which is already completed.
None	None	The project owner proposes to delete existing Condition of Certification **AQ-18** regarding emission offsets because it was applicable to the project conversion from the simple-cycle operation to combined-cycle operation, which was completed previously. The proposed modifications would not require offsets. Staff agrees.
None	None	The project owner proposes to delete existing Condition of Certification **AQ-19** regarding documentation of the emission offsets prior to the initial construction, which was completed previously. Staff agrees.
None	None	As mentioned above, the project owner proposes to replace existing **AQ-22** with the updated renumbered condition **AQ-44** since the PM10 source testing requirement specified in the original condition **AQ-22** is now included in the updated renumbered condition **AQ-44**. Staff agrees and proposes to delete existing **AQ-22**.
None	None	Staff proposes to delete existing Condition of Certification **AQ-28** since it requires notification of the initial construction and startup, which was completed previously.
None	None	As mentioned above, the project owner proposes to replace existing **AQ-32** with the updated renumbered condition **AQ-52** since the records keeping requirements specified in the original condition **AQ-32** is now included in the updated renumbered condition **AQ-52**. Staff agrees and proposes to delete existing **AQ-32**.
None	None	The project owner proposes to delete existing Condition of Certification **AQ-41** since the conversion from simple-cycle operation to combined-cycle operation was completed previously. Staff agrees.
None	None	Staff proposes to delete existing Condition of Certification **AQ-42** regarding emission reduction credit because it was applicable to the project conversion from the simple-cycle operation to combined-cycle operation, which was completed previously.
None	None	Staff proposes to delete existing Condition of Certification **AQ-44**, which requires submittal of SCR, oxidation catalyst and continuous emission monitor design details before construction because it was completed previously.
None	None	Staff proposes to delete existing Condition of Certification **AQ-46** regarding design of the heat recovery steam generator to provide space for additional SCR and oxidation catalyst if required to meet NOx and CO emission limits, which was completed previously.
None	None	As mentioned above, the existing **AQ-52** (applicable to the cooling tower) is identical to existing **AQ-1** (renumbered as **AQ-76**). Staff proposes to delete existing **AQ-52** since the current District permit for the cooling tower does not include this condition.

CEC Conditions of Certification with Revised Numbering	District Permit Conditions	Proposed Modifications and Justification
None	None	Staff proposes to delete existing Condition of Certification **AQ-53**, which requires submittal of drift eliminator design and justification for the correction factor used in PM10 emissions calculation for the cooling tower before construction because it was completed previously.
None	None	Staff proposes to delete existing Condition of Certification **AQ-54**, which requires submittal of cooling tower design details before construction because it was completed previously.
None	None	The project owner proposes to delete existing Condition of Certification **AQ-61** since the condition defines commissioning activities that already occurred between March 1, 2003 and December 31, 2003. Staff agrees.
None	None	The project owner proposes to delete existing Condition of Certification **AQ-62** since the reduced load period definition was only applicable to simple-cycle operation, not the current combined-cycle configuration. Staff agrees.

CONCLUSIONS AND RECOMMENDATIONS

Staff recommends approval of the proposed installation of a new hot gas path and an upgraded control system for the turbine generators. With the proposed modifications to the equipment description and Air Quality conditions of certification, the project would continue to comply with all applicable LORS. The proposed modifications would not result in significant impacts to ambient air quality, public health, or greenhouse gases.

AMENDED CONDITIONS OF CERTIFICATION

The modifications to the equipment description and Air Quality conditions of certification are included below. **Bold underline** indicates new language. ~~Strikethrough~~ indicates deleted language.

SJVUAPCD Permit No. S-3746-1**:** ~~General Electric Frame 7, Model PG724FA, natural gas fired gas turbine engine/electric generator listed with S-3746-2~~ **MODIFICATION OF 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 (DLN) COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING): INCREASE NOMINAL RATING TO** ~~190~~**165 MW BY RETROFIT WITH** ~~IMPROVED DLN COMBUSTORS AND UPGRADE MARK VIE TURBINE CONTROL SYSTEM~~ **ENHANCED COMPRESSOR, COMBUSTION, AND TURBINE HARDWARE SO THAT THE NEW TOTAL PLANT NOMINAL RATING WILL BE** ~~635~~**596 MW**

SJVUAPCD Permit No. S-3746-2**:** ~~- General Electric Frame 7, Model PG724FA, natural gas fired gas turbine engine/electric generator listed with S-3746-2~~ **MODIFICATION OF 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 (DLN) COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING): INCREASE NOMINAL RATING TO** ~~190~~**165 MW BY RETROFIT WITH** ~~IMPROVED DLN COMBUSTORS AND UPGRADE MARK VIE TURBINE CONTROL SYSTEM~~ **ENHANCED COMPRESSOR, COMBUSTION AND TURBINE HARDWARE SO THAT THE NEW TOTAL PLANT NOMINAL RATING WILL BE** ~~635~~**596 MW**

AQ-1 While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB) and CEC.

AQ-2 The project owner shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall submit written notification to the District and Compliance Project Manager (CPM) upon designating the unit as dormant or active.

AQ-3 While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: None.

AQ-4 Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: None.

AQ-5 Any source testing required by the District permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall conduct source testing required by the District permit.

AQ-6 Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-7~~AQ-5~~ Combustion turbine generator (CTG) and electric 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 Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-8~~AQ-6~~ ~~The~~ CTG shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The information above shall be included in the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-9~~AQ-7~~ CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitor~~(s)~~ dedicated to this unit for NOx, CO, and O_2. Continuous emissions monitor~~(s)~~ shall meet the requirements of 40 CFR ~~p~~**P**art 60, Appendices B and F, and 40 CFR ~~p~~**P**art 75, ~~and District approved protocol~~ and shall be capable of monitoring emissions during **startups and shutdowns as well as** normal operating conditions ~~and during startups and shutdowns, provided the CEM(s) pass the relative accuracy requirement specified in condition **AQ-23**~~. 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 ~~in Conditions **AQ-14**, **-15**, **-16**, and **-17**~~. [**40 CFR 60.4340(b),** District Rule**s 1080,** 2201 **and 4703, 40 CFR 64, and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-10~~AQ-60~~ ~~The~~ CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purpose**s** of calculating ammonia slip. The owner/operator 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, ~~the~~ analyzer shall be deemed out-of-control. If the analyzer is out-of-control, the owner/operator shall take appropriate corrective action and then repeat the CD check. [District Rule 2201**, and 40 CFR 64**] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall provide either the CD checks that resulted in the analyzer being declared out-of-control or a statement that no CD checks resulted in the analyzer being declared out-of-control as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-11 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-12 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-13 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

Verification: Please refer to the information requirements of Condition AQ-46.

AQ-14 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-15~~AQ-8~~ **The** ~~E~~**e**xhaust 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 O_2 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**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-16~~AQ-34~~ 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**

Verification: The Project owner shall compile the required data in the formats discussed above and submit the results to the CPM as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-17~~AQ-38~~ Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and **total accuracy testing is** ~~compliance source testing are both~~ 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**

Verification: The Project owner shall submit the continuous emission monitor audit results with the quarterly reports required of Condition **AQ-19~~AQ-40~~**.

AQ-18~~AQ-39~~ **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 Project owner 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**

Verification: The Project owner shall submit the continuous emission monitor results with the quarterly reports of Condition **AQ-19~~AQ-40~~**.

AQ-19~~AQ-40~~ **Operators of CEM systems installed at the direction of the APCO** ~~The Project owners~~ shall submit a written report **for each calendar quarter** to the APCO **and EPA (Attn: AIR-5).** ~~for each calendar quarter,~~ **The report**

is due on the 30th day following ~~within 30 days of~~ the end of the **calendar** quarter~~,~~ ~~including~~ **and shall include the following**: ~~t~~**T**ime intervals, data and magnitude of excess emissions**,**~~;~~ nature and cause of excess **(if known),** ~~(averaging period used for data reporting shall correspond to the averaging period for each respective emission standard);~~ 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;** ~~a~~**A**pplicable time and date of each period during **which the** ~~a~~ CEM was inoperative**,** ~~(~~except for zero and span checks**,**~~)~~ and the nature of system repairs and adjustments; ~~and a~~ **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**

Verification: The Project owner shall compile the required data and submit the quarterly reports to the CPM and the APCO within 30 days of the end of the quarter.

AQ-20 An excess emissions is any unit operating period in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a "4-hour rolling average NOx emission rate" is the arithmetic average of the average NOx emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NOx emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of this subpart, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hour. [40 CFR 64 and 40 CFR 60.4380(b)(1)] Federally Enforceable Through Title V Permit

Verification: The project owner shall submit the required data with the quarterly reports of Condition AQ-19.

AQ-21 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 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 60.4380. 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 60.4395 and District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall include copies of the NOx excess emissions and monitor downtime reports with the quarterly reports of Condition AQ-19.

AQ-22 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 60.4345, and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit

Verification: The project owner shall include copies of the summary reports with the quarterly reports of Condition AQ-19.

AQ-23~~**AQ-45** The project owner shall equip the a~~**A**mmonia injection grid **shall be equipped** with ~~an~~ operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-24~~**AQ-47** The project owner shall monitor and record the~~ exhaust gas temperature at ~~the SCR~~ **selective catalytic reduction** and oxidation catalyst inlets. [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-25 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

Verification: The project owner shall certify compliance with this condition as part of the quarterly reports of Condition AQ-52.

AQ-26~~**AQ-9**~~ CTG shall be **fired** exclusively ~~burn~~ **on** natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than ~~0.75~~ **0.25** grains of sulfur compounds (as S) per 100 dry standard cubic feet of natural gas. [**40 CFR 60.4330(a)(2),** District Rule 2201**, PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: Please refer to Condition **AQ-50**~~**AQ-30**~~.

AQ-27~~**AQ-24**~~ ~~Compliance with natural gas sulfur content limit shall be demonstrated within 60 days of operation of each CTG and periodically as required by 40 CFR 60 Subpart GG and 40 CFR 75. [District Rules 1081, 2540, and 4001]~~ **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 60.4360 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit**

Verification: Please refer to the information requirements of Condition **AQ-50**~~**AQ-30**~~.

AQ-28 Sulfur compound emissions shall not exceed 0.015% by volume at 15% oxygen, on a dry basis averaged over 15 consecutive minutes and 0.06 lb/MMBtu. [40 CFR 60.4330(a)(2); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit

Verification: Please refer to the information requirements of Condition AQ-50.

AQ-29~~**AQ-10**~~ Startup is defined as the period beginning with turbine initial firing. Shutdown is defined ~~as~~ **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 Rule**s** 2201**,** ~~and~~ 4001 **& 4703, and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall provide records of the emissions and operations as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-30 If the total actual emissions from both units (S-3746-1, '-2) combined exceed any of the following: NOx - 122,200 lb/year, VOC - 48,120 lb/year or PM - 142,200 lb/year, the project owner or operator must report to the District the annual NOx, VOC and PM emissions as calculated pursuant to paragraph 40 CFR 51.165(a)(6)(iii) and any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection. Such information must be submitted to the District for a period of 10 calendar years beginning the year of operation under ATCs S-3746-1-13 and '-2-13 and shall be submitted within 60 days of the end of each calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide records of the required information as part of the quarterly reports of Condition AQ-52.

AQ-31~~**AQ-63**~~ 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-32~~**AQ-64**~~ 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 in the conditions of certification when the CEMS is not operating properly. [District Rule 4703~~, 6.2.5~~] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide the required information as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-33 The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-34 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 60.4400 and District Rule 4703] Federally Enforceable Through Title V Permit

Verification: Please refer to the information requirements of Condition AQ-46.

AQ-35~~AQ-48~~ ~~The project owner shall inject a~~**A**mmonia **shall be injected** ~~into the SCR~~ when the **selective catalytic reduction system catalyst** ~~inlet~~ temperature ~~of the SCR~~ exceeds 500 °F. The project owner shall monitor and record ~~the SCR~~ **catalyst** temperature during periods of startup. [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-36~~AQ-14~~ During startup or shutdown of any ~~combustion~~ **gas** turbine **engine(s)** ~~generator(s)~~, combined emissions from ~~the two CTGs~~ **both gas turbine engines** (S-3746-1 and ~~'~~-2) **heat recovery steam generator exhausts** shall not exceed **either of** the following:

~~For simple cycle mode of operation~~
~~NOx 145.24 lbs in any one hour~~
~~CO 364.86 lbs in any one hour~~

~~For combined cycle mode of operation~~
NOx **(as NO_2) -** 700 lbs **or** ~~in any one hour~~
CO **-** 1,580 lbs**,** in any one hour**.**

~~Protocol:~~ ~~I~~If any ~~unit~~ **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 Rule 2201] Federally Enforceable Through Title V Permit**

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-37~~AQ-15~~ Emission rates from each CTG, except during startup and**/or** shutdown ~~events~~, shall not exceed any of the following:
~~[District Rules 2201, 4001, and 4703]~~

~~While operating in simple cycle mode:~~

~~PM10~~	~~9 lbs/hr~~
~~SOx (as SO_2)~~	~~3.85 lbs/hr~~
~~NOx (as NO_2)~~	~~60.93 lbs/hr~~
	~~9.0 ppm~~
~~VOC~~	~~2.81 lbs/hr~~
	~~1.3 ppm~~
~~CO~~	~~29.14 lbs/hr~~

~~7.5 ppm~~

~~NOx (as NO_2) mass and concentration emission limits are one-hour rolling averages. All other mass and concentration emission limits are three-hour rolling averages.~~

~~While operating in combined cycle mode:~~

PM10:	17.8 lbs/hr
SOx (as SO_2):	~~1.55~~ **1.58** lbs/hr
NOx (as NO_2):	~~15.96~~ **16.74** lbs/hr and 2.0 ppmvd @ 15% O2
VOC:	~~5.51~~ **5.84** lbs/hr and 2.0 ppmvd @ 15% O2
CO:	~~19.22~~ **20.38** lbs/hr and 4.0 ppmvd @ 15% O2
Ammonia:	10 ppmvd @ 15% O2

NOx (as NO_2) ~~mass and concentration emission~~ **ppmvd and lb/hr** limits are **a** one-hour rolling average~~s~~. Ammonia emission ~~concentration~~ limit is a ~~24-~~ **twenty-four** hour rolling average. All other ~~mass and concentration emission~~ **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 60.4320(a), District Rules 2201, 4001, 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit**

~~**Protocol:** Each one-hour period in a one-hour rolling average will commence on the hour. Each one-hour period in a 3-hour rolling average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. 24-hour average emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. If a unit is in either startup or shutdown mode during any portion of a clock hour, that unit will not be subject to aforementioned limits during that clock hour. [District Rule 2201]~~

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-38~~**AQ-16**~~ Emission rates from each CTG shall not exceed **any of** the following:

~~While operating in simple cycle mode:~~

~~PM10~~	~~224.00 lbs/day~~
~~SOx (as SO_2)~~	~~92.40 lbs/day~~
~~NOx (as NO_2)~~	~~1,485.70 lbs/day~~
~~VOC~~	~~99.57 lbs/day~~
~~CO~~	~~1,005.93 lbs/day~~

~~While operating in combined cycle mode:~~

PM10	~~461.2~~ **432.0** lbs/day**,**
SOx (as SO_2)	~~37.2~~ **37.4** lbs/day**,**
NOx (as NO_2)	~~1,170.9~~ **1,127.3** lbs/day**,**
VOC **(as methane)**	~~220.6~~ **211.5** lbs/day**, or**
CO	~~2,443.4~~ **2,301.8** lbs/day

[District Rule 2201] **Federally Enforceable Through Title V Permit**

~~Protocol: Daily emissions will be compiled for a 24-hour period starting and ending at twelve midnight. [District Rule 2201]~~

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-39~~**AQ-50**~~ Emission rates from BOTH CTGs (S-3746-1 and ~~-~~**-**2)~~, on days when a startup or shutdown occurs for either or both turbines,~~ shall not exceed any of the following:

PM10:	~~922.3~~ **863.9** lbs/day**,**
SOx (as SO_2):	~~74.4~~ **74.8** lbs/day**,**
NOx (as NO_2):	~~2,341.8~~ **2,254.5** lbs/day**,**
VOC **(as methane)**:	~~441.2~~ **423.1** lbs/day**, or**
CO:	~~4,886.8~~ **4,604.5** lbs/day

[District Rule 2201 **and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-40~~**AQ-17**~~ ~~Quarterly and a~~**A**nnual emissions from both CTGs ~~combined~~ **calculated on a twelve consecutive month rolling basis** shall not exceed any of the following~~ limits~~:

~~For simple cycle operation:~~
~~During the year of 2001 (units are in pounds):~~

	~~1st Quarter~~	~~2nd Quarter~~	~~3rd Quarter~~	~~4th Quarter~~	~~Annual Total~~
~~PM10~~	~~0~~	~~9,400~~	~~41,216~~	~~32,442~~	~~83,058~~
~~SOx (as SO2)~~	~~0~~	~~3,734~~	~~15,897~~	~~13,248~~	~~32,880~~
~~NOx (as NO2)~~	~~0~~	~~59,398~~	~~256,754~~	~~213,971~~	~~530,123~~
~~VOC~~	~~0~~	~~2,976~~	~~17,504~~	~~15,581~~	~~36,061~~
~~CO~~	~~0~~	~~30,338~~	~~175,346~~	~~156,685~~	~~362,369~~

~~During the year of 2002 & 2003 (units are in pounds):~~

	~~1st Quarter~~	~~2nd Quarter~~	~~3rd Quarter~~	~~4th Quarter~~	~~Annual Total~~
~~PM10~~	~~40,320~~	~~40,768~~	~~41,216~~	~~41,216~~	~~98,592~~
~~SOx (as SO2)~~	~~16,632~~	~~15,725~~	~~15,898~~	~~17,002~~	~~38,736~~
~~NOx (as NO2)~~	~~267,426~~	~~253,962~~	~~256,745~~	~~273,369~~	~~628,888~~
~~VOC~~	~~17,922~~	~~17,314~~	~~17,505~~	~~18,320~~	~~48,320~~
~~CO~~	~~181,068~~	~~173,440~~	~~175,346~~	~~185,092~~	~~482,994~~

~~For combined cycle operation:~~

~~Annual emission limits only~~
PM10: ~~269,651~~**269,442** lbs/year**,**
SOx (as SO2): ~~24,259~~**23,434** lbs/year**,**
NOx (as NO2): ~~311,337~~**311,197** lbs/year**,**
VOC: ~~87,674~~**87,606** lbs/year**, or**
CO: ~~507,978~~**505,211** lbs/year
[District Rule 2201 **and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

~~Protocol: Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions total to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201]~~

~~While operating as a simple cycle power plant, the applicant shall submit to the CPM for approval the following summary of emissions and mitigation allocation in the quarterly reports required in Condition of Certification **AQ-3**.~~

- ~~Total monthly and quarterly NOx emissions as reported by the CEM.~~
- ~~Total monthly and quarterly CO emission as reported by the CEM.~~
- ~~Total monthly and quarterly fuel usage as reported by the fuel meter.~~
- ~~The most recent source test results (in units of lbs of emission per unit fuel use) for PM10, SO2 and either VOC or CO/VOC surrogate and their respective dates.~~

~~While operating as a simple cycle power plant, the applicant shall submit for approval by the CPM, a single table for each quarter in which the applicant shall show the quarterly emissions and mitigation in the following manner. The applicant shall include such a table or an equivalent table approved by the CPM for each quarter in the calendar year in each quarterly report submitted by the applicant.~~

	~~First Quarter~~		
	~~Actual Emissions as recorded or calculated (lbs)~~	~~ERCs Surrendered as allocated by AQ-18 (lbs)~~	~~CARB ERC allocation annual total not to exceed 402,192 lbs (lbs)~~
~~NOx~~			
~~CO~~			
~~VOC~~			
~~PM10~~			
~~SOx~~			
~~First Quarter Total CARB ERCs Allocated~~			

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-41 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 Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-42 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 Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-43~~AQ-51~~ ~~The project owner shall demonstrate compliance with the ammonia slip level by~~ **Ammonia slip limit shall be measured** using the following calculation procedure:

Ammonia Slip ppmv @ 15% O2 = ((a-(b**×**c/1,000,000)) ×

(1,000,000/b) × d Where:

a = ammonia injection rate (lbs/hr)/17 (lb/lb mole)**,**

b = dry exhaust gas flow rate (lbs/hr)/29 (lb/lb mole)**,**

c = change in measured NOx concentration ppmv @ 15% O2 across the catalyst**, and**

d = correction factor.

~~Protocol:~~ The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip.

Alternatively, the project owner may utilize a continuous in-stack ammonia monitor, acceptable to the District, to monitor ~~for~~ 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**

Verification: If the project owner must submit a monitoring plan for District and CPM review at least 60 days prior to its use, if the owner chooses to utilize a continuous in-stack ammonia monitor. The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-44~~AQ-20~~ ~~Source testing to demonstrate compliance with the NOx, CO, and VOC s~~**S**hort- term emission limits (lb~~s~~/hr and ppmv @ 15% O2) shall be **measured** ~~conducted within 60 days of initial operation of CTG and~~ annually ~~thereafter~~ by District witnessed **in-situ** sampling of exhaust gas**es** by **a** qualified independent source ~~testers~~ **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**s** 1081 **and 4703, and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: Please refer to the information requirements of Condition **AQ-46~~AQ-25~~**.

AQ-45~~AQ-23~~ ~~Source testing of s~~**S**tartup NOx, CO, **and** VOC~~, and PM10~~ mass emission **limits** ~~rates~~ shall be **measured** ~~conducted~~ for one of the **CTGs** ~~gas turbine engines~~ (S-~~3~~3746-1-~~0~~**,** or -2-~~0~~) ~~upon initial operation and~~ at least ~~once~~ every seven years ~~thereafter~~ by District witnessed in-situ sampling of exhaust gases by a qualified independent source test firm. ~~CEM relative accuracy shall be determined during startup source testing in accordance with District approved protocol.~~ [District Rule 1081] **Federally Enforceable Through Title V Permit**

Verification: Please refer to the information requirements of Condition **AQ-46~~AQ-25~~**.

AQ-46~~AQ-25~~ The District **and the EPA** must be notified 30 days prior to any ~~compliance~~ source test, and a source test plan must be submitted for approval 15 days prior to testing. 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**

Verification: The Project owner shall notify the CPM and the District 30 days prior to any compliance source test. The Project owner shall provide a source test plan to the CPM and District for the CPM and District approval 15 days prior to testing. The results and field data collected by the source tests shall be submitted to the CPM and the District within 60 days of testing.

AQ-47~~AQ-27~~ 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 60.4400,** District Rules 1081, 4001, ~~and~~ 4703**, and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: As part of the test plan to be submitted under Condition **AQ-46~~AQ-25~~**, the Project owner shall identify the test methods to be used in the annual compliance source testing.

AQ-48 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

Verification: Please refer to the information requirements of Condition AQ-46.

AQ-49~~AQ-29~~ The Project owner shall maintain hourly records of NOx, ~~and~~ CO**, and ammonia** emission concentrations (ppmv @ 15% O2), and hourly, daily, and ~~annual~~ **twelve month rolling average** records of NOx and CO emissions. ~~Compliance with the hourly, daily, and annual VOC emission limits shall be~~

~~demonstrated by the CO CEM data and the CO/VOC relationship determined by annual CO and VOC source tests upon combined cycle operation.~~ [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-50~~AQ-30~~ The Project owner shall maintain records of SOx lbs/hr, lbs/day, and lbs/twelve month rolling **average** emissions. SOx emission**s** ~~rates~~ shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall provide records of the information described above as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-51 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-52~~AQ-31~~ The Project owner **or operator** shall maintain ~~the following~~ records **that contain the following:** ~~for each CTG:~~ **the** occurrence~~,~~ **and** duration~~, and type~~ of any startup, 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~~; total daily and annual hours of operation; and hourly quantity of fuel used~~. [**40 CFR 60.7(b), 40 CFR 60.8(d),** District Rules **1080 and** 2201 ~~and 4703~~**, 40 CFR 64 and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall compile required data and copies of the daily logs and submit the information to the CPM in quarterly reports submitted no later than 30 days after the end of each calendar quarter.

AQ-53 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-54~~**AQ-65**~~ 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 startup and each shutdown time period. [District Rule 4703~~, 6.2.6 & 6.2.7~~] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide the required information as part of the quarterly reports of Condition **AQ-52**~~**AQ-31**~~.

AQ-55~~**AQ-33**~~ 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 Rule**s** 2201 **and 4703, and PSD SJ 01-01**] **Federally Enforceable Through Title V Permit**

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-56 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-57 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-58 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-59 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-60 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-61 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-62 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-63 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

Verification: None.

AQ-64 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

Verification: None.

AQ-65 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-66 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-67 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-68 The owners and operators of 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 superseded

because of the submission of a new certificate of representation changing the designated representative. [40 CFR Part 72] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-69 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-70 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-71 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

Verification: None.

AQ-72 Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR Part 60, Subpart KKKK; 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

Verification: None.

AQ-73 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

Verification: None.

Conditions of Certification AQ-74 through AQ-76 apply to the whole facility.

AQ-74~~AQ-35~~ The Project owner 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**

Verification: The Project owner shall comply with the notification requirements of the District and submit written copies of these notification reports to the CPM as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-75~~AQ-36~~ 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**

Verification: The Project owner shall comply with the notification requirements of the District and submit written copies of these notification reports to the CPM as part of the quarterly reports of Condition **AQ-52~~AQ-31~~**.

AQ-76~~AQ-1~~ No air contaminant shall be released into the atmosphere, which causes a public nuisance. [District Rule 4102]

Verification: The Project owner shall make the site available for inspection by representatives of the District, ~~California Air Resources Board (~~CARB~~)~~ and ~~the Commission~~ **CEC**.

S-3746-3: 137,000 GALLON/MINUTE COOLING TOWER WITH UP TO 10 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATORS

AQ-77 While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-78 The project owner shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]

Verification: The project owner shall submit written notification to the District and CPM upon designating the unit as dormant or active.

AQ-79 While dormant, normal source testing shall not be required. [District Rule 2080]

Verification: None.

AQ-80 Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]

Verification: None.

AQ-81 Any source testing required by the District permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]

Verification: The project owner shall conduct source testing required by the District permit.

AQ-82 Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-83 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

Verification: The project owner shall certify compliance with this condition as part of the quarterly reports of Condition AQ-52.

AQ-84~~AQ-55~~ No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-85~~AQ-56~~ Drift eliminator drift rate shall not exceed 0.0006%. [District **NSR** Rule ~~2201~~] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall submit documentation from the selected cooling tower vendor that verifies the drift efficiency to the CPM 30 days prior to commencement of construction of the cooling towers.

AQ-86~~AQ-57~~ PM10 emission rate shall not exceed 15.78 lb/day. [District **NSR** Rule ~~2201~~] **Federally Enforceable Through Title V Permit**

Verification: Please refer to Condition **AQ-87~~AQ-58~~**.

AQ-87~~AQ-58~~ Compliance with the PM10 daily emission limit shall 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 ~~2201~~] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-88~~AQ-59~~ Compliance with PM10 emission limit shall be determined **quarterly** by circulating water sample analysis **performed** by **an** independent laboratory ~~within 90 days of initial operation and quarterly thereafter~~. [District Rule ~~1081~~ **2520, 9.3.2**] **Federally Enforceable Through Title V Permit**

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and ~~the Commission~~ **CEC**.

AQ-89 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-2 The Project owner shall submit continuous emission monitor design, installation and operational details to the District at least 30 days prior to commencement of construction. [District Rule 2201]

Verification: The Project owner shall provide copies of the design drawings of the catalyst system chosen and the continuous emission monitor design detail to the CPM and the District at least 30 days prior to commencement of construction.

AQ-3 Deleted.

AQ-4 Deleted.

AQ-11 Deleted.

AQ-12 Deleted.

AQ-13 Deleted.

AQ-18 Emission offsets shall be surrendered for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) in the following table.

For the year 2001

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
PM10	0	9,400	41,216	32,442
SOx (as SO_2)	0	3,734	15,898	13,248
NOx (as NO_2)	0	57,157	247,068	205,898
VOC	0	1,326	7,796	6,940

For the years 2002 and 2003

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
PM10	24,342	24,594	24,828	24,828
SOx (as SO_2)	9,879	9,338	9,432	10,087
NOx (as NO_2)	154,994	147,063	148,547	158,284
VOC	7,222	6,828	6,896	7,374

[District Rule 2201]

The following emissions offsets shall be provided to the District to provide additional environmental benefits during the initial phase of this Project and

shall be used towards the offset requirements, if needed, when the next phase of this Project is implemented:

For the year 2001

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
PM10	72,121	62,468	21,286	34,178
SOx (as SO_2)	14,075	9,750	0	0
NOx (as NO_2)	92,450	0	0	0
VOC	13,949	12,513	4,904	5,931

For the years 2002 and 2003

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
PM10	42,911	44,235	44,505	43,964
SOx (as SO_2)	2,220	3,025	3,069	2,283
NOx (as NO_2)	0	0	0	0
VOC	5,283	5,910	5,984	5,410

[District Rule 2201]

The following emissions offsets shall be provided to the District to provide additional environmental benefits during the initial phase of phase II of the Sunrise Project and shall be used towards the offset requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
PM10	10,541	8,266	20,637	16,404
NOx (as NO_2)	9,157	4,195	0	6,571
VOC	4,983	3,111	5,791	6,648

Verification: The Project owner shall provide copies of all the necessary ERC certificates to the CPM.

AQ-19 At least 30 days prior to commencement of construction, the Project owner shall provide the District, with written documentation that all necessary offsets have been acquired or that binding contracts to secure such offsets have been entered into. [District Rule 2201]

Verification: The Project owner shall provide copies of all the necessary ERC certificates to the CPM no later than 30 days prior to the commencement of construction.

AQ-21 Deleted.

AQ-22 Source testing to demonstrate compliance with PM10 short-term emission limit (lbs/hr) shall be conducted within 60 days of initial operation, and annually thereafter by District witnessed sampling of exhaust gas by qualified independent source testers. If CTG is operated during the winter (December, January, or February) then additional testing shall be conducted within 30 days of such operation. [District Rule 1081]

Verification: Please refer to the information requirements of Condition **AQ-25**.

AQ-26 Deleted.

AQ-28 The Project owner shall notify the District of the date of initiation of construction no later than 30 days after such date, the date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and the date of actual startup within 15 days after such date. [District Rule 4001]

Verification: The Project owner shall notify the CPM and the District of the date of initiation of construction no later than 30 days after such date. The Project owner shall notify the CPM and the District of the date of anticipated startup not more than 60 days nor less than 30 days prior to such date, and the date of actual startup within 15 days after such date.

AQ-32 The Project owner shall maintain the following records for the continuous emissions monitoring system (CEMS): performance testing, evaluations, calibrations, checks, maintenance, adjustments, and any period of nonoperation of any continuous emissions monitor. [District Rules 2201 and 4703]

Verification: The Project owner shall compile the required data in the formats discussed above and submit the results to the CPM as part of the quarterly reports of Condition **AQ-31**.

AQ-37 Deleted.

AQ-41 The project owner will cease the simple cycle operation of the Sunrise Power Project and convert it to combined cycle operation prior to January 1, 2004.

Verification: The project owner shall submit to the CPM a valid and current Authority to Construct issued to them by the San Joaquin Valley Unified Air Pollution Control District authorizing the Sunrise Power Project to begin construction on the Sunrise Power Project for conversion to combined Cycle operation no later than January 1,

2003. The project owner shall submit to the CPM a valid and current Permit to Operate issued to them by the San Joaquin Valley Unified Air Pollution Control District authorizing the Sunrise Power Project to operate as a combined cycle power plant no later than 30 days prior to the first expected date of operation as a combined cycle power plant.

AQ-42 The Project owner shall not claim emission reduction credit for any additional NOx emission reductions above and beyond the original ERC package that may result from a conversion of the simple cycle Project to a combined cycle or cogeneration Project. The original ERC package in its entirety, including NOx ERCs, may be used to offset the emissions from the combined cycle or cogeneration conversion. In the event of a permanent shutdown of the simple cycle facility, the Project owner shall not claim emission reduction credit for NOx reductions beyond those based on actual NOx emissions adjusted to reflect emissions at 5 ppm. In the event of a permanent shutdown of the simple cycle facility, the Project owner will discuss disposition of the ERCs in the Facility's Closure Plan.

Verification: The Project owner shall submit to the CPM for review and comment any application for ERCs within 30 days of submittal to the District.

AQ-43 Deleted.

AQ-44 The project owner shall submit selective catalytic reduction, oxidation catalyst and continuous emission monitor design details to the District and the CPM prior to commencement of construction. [District Rule 4102]

Verification: The Project owner shall provide the information identified in this condition no later than 30 prior to the commencement of construction of permanent structures on the project site.

AQ-46 The project owner shall design the heat recovery steam generator to provide space for additional SCR and oxidation catalyst if required to meet NOx and CO emission limits. [District Rule 2201]

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and the Commission.

AQ-49 Deleted.

AQ-52 No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission.

AQ-53 The project owner shall submit drift eliminator design details and vendor specific emission justification for the correction factor to be used to correlate blowdown TDS to drift TDS and the amount of drift that stays suspended in the atmosphere in the equation in Condition AQ-58 to the District. [District Rule 2201]

Verification: 30 days prior to commencement of construction of the cooling towers, the project owner shall submit the information required above to the District and the CPM.

AQ-54 The project owner shall submit cooling tower design details including the cooling tower type and materials of construction to the District at least 30 days prior to commencement of construction, and at least 90 days before the tower is operated. [District Rule 7012]

Verification: 30 days prior to commencement of construction of the cooling towers, the project owner shall submit the information required above to the District and the CPM.

AQ-61 Relief shall be granted from Conditions of Certification **AQ-7**, **AQ-10**, **AQ-14**, **AQ-15**, **AQ-16**, **AQ-20**, **AQ-22**, **AQ-49** and **AQ-50** for the duration of the Commissioning period of the Sunrise Phase II combined cycle power project.

During Commissioning, NOx emissions shall not exceed 17,770 lbs/day.

During Commissioning but prior to the oxidation catalyst being installed, CO emissions shall not exceed 27,513 lbs/day.

During Commissioning and following the installation of the oxidation catalyst, CO emissions shall not exceed 5,703 lbs/day.

Commissioning activities shall not exceed 120 days cumulatively of operation. Commissioning activities shall occur between March 1, 2003 and December 31, 2003.

The owner/operator shall record and quantify, via CEMS or District approved source testing, the actual NOx and CO emissions associated with the Commissioning period, except for the first 24-hours after the first initial firing.

Verification: The project owner shall provide records of recorded emissions and operation as part of the quarterly reports of Condition **AQ-31**.

AQ-62 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 shall not exceed one hour. [District Rule 4703, 3.23] Federally Enforceable through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission.

REFERENCES

CEC 2001 – California Energy Commission (CEC). Staff Analyses of Proposed Project Modification Conversion to Combined-Cycle Operations (TN 23069), docketed November 15, 2001.

District 2022 – San Joaquin Valley Air Pollution Control District (District). Proposed ATC / Certificate of Conformity (Significant Mod), Facility Number: S-3746, Project Number: S-1204133, dated October 3, 2022. Accessed October 2022. Available online at: http://www.valleyair.org/notices/Docs/2022/10-03-2022_(S-1204133)/Packet.pdf.

Sunrise 2021 – Sunrise Power Project (Sunrise), Sunrise Power Improvement Project (TN 237495), dated April 19, 2021.

U.S. EPA 2022 – United States Environmental Protection Agency (U.S. EPA). Outdoor Air Quality Data, Monitor Values Report. Accessed October 2022. Available online at: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report

Air Quality Conditions of Certification
(Clean Version)

SJVUAPCD Permit No. S-3746-1: MODIFICATION OF 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 (DLN) COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING): INCREASE NOMINAL RATING TO ~~190~~ **165** MW BY RETROFIT WITH ~~IMPROVED DLN COMBUSTORS AND UPGRADE MARK VIE TURBINE CONTROL SYSTEM~~ **ENHANCED COMPRESSOR, COMBUSTION AND TURBINE HARDWARE SO THAT THE NEW TOTAL PLANT NOMINAL RATING WILL BE** ~~635~~**596 MW**

SJVUAPCD Permit No. S-3746-2: MODIFICATION OF 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 (DLN) COMBUSTORS, HEAT RECOVERY STEAM GENERATOR WITH DUCT FIRING, SCR, AND OXIDATION CATALYSTS (585 MW TOTAL PLANT NOMINAL RATING): INCREASE NOMINAL RATING TO ~~190~~ **165** MW BY RETROFIT WITH ~~IMPROVED DLN COMBUSTORS AND UPGRADE MARK VIE TURBINE CONTROL SYSTEM~~ **ENHANCED COMPRESSOR, COMBUSTION AND TURBINE HARDWARE SO THAT THE NEW TOTAL PLANT NOMINAL RATING WILL BE** ~~635~~**596 MW**

AQ-1 While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (CARB) and CEC.

AQ-2 The project owner shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall submit written notification to the District and Compliance Project Manager (CPM) upon designating the unit as dormant or active.

AQ-3 While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: None.

AQ-4 Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: None.

AQ-5 Any source testing required by the District permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit

remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit

Verification: The project owner shall conduct source testing required by the District permit.

AQ-6 Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-7 Combustion turbine generator (CTG) and electric 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 Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-8 CTG shall be equipped with continuously recording fuel gas flowmeter. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The information above shall be included in the quarterly reports of Condition **AQ-52**.

AQ-9 CTG exhaust after the SCR unit shall be equipped with continuously recording emissions monitors dedicated to this unit for NOx, CO, and O_2. 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 60.4340(b), District Rules 1080, 2201 and 4703, 40 CFR 64, and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-10 CTG shall be equipped with a continuously recording emission monitor preceding the SCR module measuring NOx concentration for the purpose**s** of calculating ammonia slip. The owner/operator 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 owner/operator shall take appropriate corrective action and then repeat the CD check. [District Rule 2201, and 40 CFR 64] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide either the CD checks that resulted in the analyzer being declared out-of-control or a statement that no CD checks resulted in the analyzer being declared out-of-control as part of the quarterly reports of Condition **AQ-52**.

AQ-11 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-12 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-13 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

Verification: Please refer to the information requirements of Condition AQ-46.

AQ-14 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-15 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 O_2 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.

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-16 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

Verification: The Project owner shall compile the required data in the formats discussed above and submit the results to the CPM as part of the quarterly reports of Condition **AQ-52**.

AQ-17 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

Verification: The Project owner shall submit the continuous emission monitor audit results with the quarterly reports required of Condition **AQ-19**.

AQ-18 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 Project owner 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

Verification: The Project owner shall submit the continuous emission monitor results with the quarterly reports of Condition **AQ-19**.

AQ-19 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

Verification: The Project owner shall compile the required data and submit the quarterly reports to the CPM and the APCO within 30 days of the end of the quarter.

AQ-20 An excess emissions is any unit operating period in which the 4-hour or 30-day rolling average NOx emission rate exceeds the applicable emission limit in §60.4320. For the purposes of this subpart, a "4-hour rolling average NOx emission rate" is the arithmetic average of the average NOx emission rate in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NOx emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of this subpart, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hour. [40 CFR 64 and 40 CFR 60.4380(b)(1)] Federally Enforceable Through Title V Permit

Verification: The project owner shall submit the required data with the quarterly reports of Condition **AQ-19**.

AQ-21 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 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 60.4380. 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 60.4395 and District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall include copies of the NOx excess emissions and monitor downtime reports with the quarterly reports of Condition **AQ-19**.

AQ-22 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 60.4345, and 40 CFR 60.7(c) and (d)] Federally Enforceable Through Title V Permit

Verification: The project owner shall include copies of the summary reports with the quarterly reports of Condition **AQ-19**.

AQ-23 Ammonia injection grid shall be equipped with operational ammonia flowmeter and injection pressure indicator. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-24 The project owner shall monitor and record exhaust gas temperature at selective catalytic reduction and oxidation catalyst inlets. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-25 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

Verification: The project owner shall certify compliance with this condition as part of the quarterly reports of Condition **AQ-52**.

AQ-26 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 standard cubic feet of natural gas. [40 CFR 60.4330(a)(2), District Rule 2201, PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: Please refer to Condition **AQ-50**.

AQ-27 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 60.4360 and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

Verification: Please refer to the information requirements of Condition **AQ-50**.

AQ-28 Sulfur compound emissions shall not exceed 0.015% by volume at 15% oxygen, on a dry basis averaged over 15 consecutive minutes and 0.06 lb/MMBtu. [40 CFR 60.4330(a)(2); County Rule 407 (Kern)] Federally Enforceable Through Title V Permit

Verification: Please refer to the information requirements of Condition **AQ-50**.

AQ-29 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

Verification: The project owner shall provide records of the emissions and operations as part of the quarterly reports of Condition **AQ-52**.

AQ-30 If the total actual emissions from both units (S-3746-1, '-2) combined exceed any of the following: NOx - 122,200 lb/year, VOC - 48,120 lb/year or PM - 142,200 lb/year, the project owner or operator must report to the District the annual NOx, VOC and PM emissions as calculated pursuant to paragraph 40 CFR 51.165(a)(6)(iii) and any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection. Such information must be submitted to the District for a period of 10 calendar years beginning the year of operation under ATCs S-3746-1-13 and '-2-13 and shall be submitted within 60 days of the end of each calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide records of the required information as part of the quarterly reports of Condition **AQ-52**.

AQ-31 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-32 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 in the conditions of certification when

the CEMS is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide the required information as part of the quarterly reports of Condition **AQ-52**.

AQ-33 The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-34 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 60.4400 and District Rule 4703] Federally Enforceable Through Title V Permit

Verification: Please refer to the information requirements of Condition **AQ-46**.

AQ-35 Ammonia shall be injected when the selective catalytic reduction system catalyst temperature exceeds 500°F. The project owner shall monitor and record catalyst temperature during periods of startup. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-36 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 either of the following:

NOx (as NO_2) - 700 lbs or
CO - 1,580 lbs, 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 Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-37 Emission rates from each CTG, except during startup and/or shutdown, shall not exceed any of the following:

PM10:	17.8 lbs/hr
SOx (as SO_2):	~~1.55~~ 1.58 lbs/hr

NOx (as NO_2):	16.74 lbs/hr and 2.0 ppmvd @ 15% O2
VOC:	5.84 lbs/hr and 2.0 ppmvd @ 15% O2
CO:	20.38 lbs/hr and 4.0 ppmvd @ 15% O2
Ammonia:	10 ppmvd @ 15% O2

NOx (as NO_2) ppmvd and lb/hr limits are a one-hour rolling averages. 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 60.4320(a), District Rules 2201, 4001, 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-38 Emission rates from each CTG shall not exceed any of the following:

PM10	432.0 lbs/day,
SOx (as SO_2)	37.4 lbs/day,
NOx (as NO_2)	1,127.3 lbs/day,
VOC (as methane)	211.5 lbs/day, or
CO	2,301.8 lbs/day

[District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-39 Emission rates from BOTH CTGs (S-3746-1 and -2 shall not exceed any of the following:

PM10:	863.9 lbs/day,
SOx (as SO_2):	74.8 lbs/day,
NOx (as NO_2):	2,254.5 lbs/day,
VOC (as methane):	423.1 lbs/day, or
CO:	4,604.5 lbs/day

[District Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-40 Annual emissions from both CTGs calculated on a twelve consecutive month rolling basis shall not exceed any of the following:

PM10:	269,442 lbs/year,
SOx (as SO2):	23,434 lbs/year,
NOx (as NO2):	311,197 lbs/year,
VOC:	87,606 lbs/year, or
CO:	505,211 lbs/year

[District Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-41 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 Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-42 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 Rule 2201 and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-43 Ammonia slip limit shall be measured using the following calculation procedure:

Ammonia Slip ppmv @ 15% O2 = ((a-(b×c/1,000,000)) ×

(1,000,000/b) × d Where:

a = ammonia injection rate (lbs/hr)/17 (lb/lb mole),

b = dry exhaust gas flow rate (lbs/hr)/29 (lb/lb mole),

c = change in measured NOx concentration ppmv @ 15% O2 across the catalyst, and

d = correction factor.

The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip.

Alternatively, the project owner 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

Verification: If the project owner must submit a monitoring plan for District and CPM review at least 60 days prior to its use, if the owner chooses to utilize a continuous in-stack ammonia monitor. The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-44 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

Verification: Please refer to the information requirements of Condition **AQ-46**.

AQ-45 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

Verification: Please refer to the information requirements of Condition **AQ-46**.

AQ-46 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

Verification: The Project owner shall notify the CPM and the District 30 days prior to any compliance source test. The Project owner shall provide a source test plan to the CPM and District for the CPM and District approval 15 days prior to testing. The results and field data collected by the source tests shall be submitted to the CPM and the District within 60 days of testing.

AQ-47 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 60.4400, District Rules 1081, 4001, 4703, and PSD SJ 01-01] Federally Enforceable Through Title V Permit

Verification: As part of the test plan to be submitted under Condition **AQ-46**, the Project owner shall identify the test methods to be used in the annual compliance source testing.

AQ-48 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

Verification: Please refer to the information requirements of Condition **AQ-46**.

AQ-49 The Project owner 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 Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the emissions as part of the quarterly reports of Condition **AQ-52**.

AQ-50 The Project owner shall maintain records of SOx lbs/hr, lbs/day, and lbs/twelve month rolling average emissions. SOx emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

Verification: The Project owner shall provide records of the information described above as part of the quarterly reports of Condition **AQ-52**.

AQ-51 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-52 The Project owner or operator shall maintain records that contain the following: the occurrence and duration of any startup, 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

Verification: The Project owner shall compile required data and copies of the daily logs and submit the information to the CPM in quarterly reports submitted no later than 30 days after the end of each calendar quarter.

AQ-53 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-54 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 startup and each shutdown time period. [District Rule 4703] Federally Enforceable Through Title V Permit

Verification: The project owner shall provide the required information as part of the quarterly reports of Condition **AQ-52**.

AQ-55 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

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-56 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-57 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-58 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-59 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-60 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-61 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-62 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-63 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

Verification: None.

AQ-64 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

Verification: None.

AQ-65 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-66 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-67 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-68 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 superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR Part 72] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-69 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-70 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

Verification: The project owner shall certify compliance with this condition as part of the Annual Compliance Report.

AQ-71 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

Verification: None.

AQ-72 Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR Part 60, Subpart KKKK; 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

Verification: None.

AQ-73 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

Verification: None.

Conditions of Certification **AQ-74** through **AQ-76** apply to the whole facility.

AQ-74 The Project owner 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

Verification: The Project owner shall comply with the notification requirements of the District and submit written copies of these notification reports to the CPM as part of the quarterly reports of Condition **AQ-52**.

AQ-75 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

Verification: The Project owner shall comply with the notification requirements of the District and submit written copies of these notification reports to the CPM as part of the quarterly reports of Condition **AQ-52**.

AQ-76 No air contaminant shall be released into the atmosphere, which causes a public nuisance. [District Rule 4102]

Verification: The Project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

S-3746-3: 137,000 GALLON/MINUTE COOLING TOWER WITH UP TO 10 CELLS AND HIGH EFFICIENCY DRIFT ELIMINATORS

AQ-77 While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-78 The project owner shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]

Verification: The project owner shall submit written notification to the District and CPM upon designating the unit as dormant or active.

AQ-79 While dormant, normal source testing shall not be required. [District Rule 2080]

Verification: None.

AQ-80 Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]

Verification: None.

AQ-81 Any source testing required by the District permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]

Verification: The project owner shall conduct source testing required by the District permit.

AQ-82 Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-83 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit

Verification: The project owner shall certify compliance with this condition as part of the quarterly reports of Condition **AQ-52**.

AQ-84 No hexavalent chromium containing compounds shall be added to cooling tower circulating water. [District Rule 7012] Federally Enforceable Through Title V Permit

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-85 Drift eliminator drift rate shall not exceed 0.0006%. [District NSR Rule] Federally Enforceable Through Title V Permit

Verification: The project owner shall submit documentation from the selected cooling tower vendor that verifies the drift efficiency to the CPM 30 days prior to commencement of construction of the cooling towers.

AQ-86 PM10 emission rate shall not exceed 15.78 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit

Verification: Please refer to Condition **AQ-87**.

AQ-87 Compliance with the PM10 daily emission limit shall 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

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-88 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

Verification: The project owner shall compile the required daily PM10 emissions data and maintain the data for a period of five years. The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.

AQ-89 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

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB and CEC.