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Project Title:	Sunrise Cogeneration Power Project (Compliance)		
TN #:	262250		
Document Title:	Sunrise Power Plant Staff Approved Project Change for the SPP Repowering Project - Turbine Component Downgrade		
Description:	Sunrise Power Plant SAPC STaff Assessment for a Change in Turbine Components		
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STATEMENT OF STAFF APPROVAL OF POST CERTIFICATION CHANGE Sunrise Power Plant (98-AFC-04C)

On May 21, 2024, the Sunrise Power Company, LLC, the project owner, filed a post certification petition with the California Energy Commission (CEC) requesting to amend the Sunrise Power Project (SPP) Final Commission Decision (Decision). The project owner is seeking approval to modify its previously approved petition, the "Sunrise Improvement Project" (TN# 248167), which increased megawatt (MW) production at the facility from 585 MW to 635 MW; however, due to interconnection limitations, the Sunrise Improvement Project was not initiated. The requested modification under the revised petition, "Sunrise Repowering Project" (TN# 256480), would reduce the MW generated by SPP to a maximum of 596 MWs.

The SPP is a 585-MW combined-cycle, natural-gas powered facility that was certified by the CEC in December 2000. It began commercial operation in June of 2001. The facility is located at 12857 Sunrise Power Road in Fellows, Kern County; approximately 35 miles southwest of the city of Bakersfield.

DESCRIPTION OF PROPOSED CHANGE

On December 19, 2022, the CEC approved a petition to replace a section of the gas turbine with improved technology, an improved combustion turbine system, and an upgraded turbine generator control system, as well as the addition of and revisions to Air Quality conditions of certification (COCs). The turbine improvements were intended to improve performance and efficiency, increasing the plant's output from 585 MW to 635 MW.

On May 23, 2023, Sunrise Power Company, LLC., met with Pacific Gas and Electric (PG&E) to request a 35 MW increase above their 2000 interconnection agreement capacity limit of 600 MW. The interconnection discussion resulted in SPP entering under a new Large Generator Interconnection Agreement (LGIA), limiting power production at the facility to 600 MW. Due to the 600 MW LGIA limitation, SPP changed uprate¹ providers from General Electric (GE) to Power Systems Manufacturing (PSM), because the PSM's 596 MW proposal would be a

¹ Uprate- An increase in available electric generating unit power capacity due to a system or equipment modification. Source: US Energy Information Administration

more suitable capacity match than the GE's proposal, considering the revised LGIA capacity limitation.

The project owner is seeking approval to modify the internal components of the combustion turbine previously approved on December 19, 2022, as part of the "Sunrise Improvement Project" (TN# 248167). The requested modification under the revised petition, "Sunrise Repowering Project" would allow the facility to output to a maximum of 596 MW in lieu of the original 635 MW. SPP will achieve the MW output by changing uprate providers from GE under the "Power Improvement Project" petition to PSM for the "Sunrise Repowering Project" petition. The change in uprate providers is a more suitable capacity match for the revised LGIA that was approved on May 23, 2023. For additional information, go to the CEC's project webpage, https://www.energy.ca.gov/powerplant/simple-cycle/sunrise-power-project. In the box labeled "Compliance Proceeding" click on the "Docket Log (98-AFC-04C)" to access documents for this Proceeding.

CEC STAFF REVIEW AND CONCLUSIONS

California Code of Regulations, title 20, section 1769(a)(1) 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. Pursuant to 1769(a)(3)(A), the petition may be approved by CEC staff (staff) only if the following criteria are met:

- i. There is no possibility that the change may have a significant impact on the environment, or the change is exempt from the California Environmental Quality Act;
- ii. The changes would not cause the project to fail to comply with any applicable laws, ordinances, regulations, or standards (LORS); and
- iii. The changes will not require a change to, or deletion of, a condition of certification adopted by the Commission in the Final Decision or subsequent amendments.

Section 1769(a)(3)(B) allows staff to approve changes to air quality conditions of certification provided that:

- i. the criteria in subdivisions (a)(3)(A)(i) and (ii) are met; and
- ii. no daily, quarterly, annual or other emission limit will be increased as a result of the change.

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

Table 1Summary of Conclusions for all Technical and Environmental Areas

		CEQA				
Technical Areas Reviewed	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	Conforms with applicable LORS	
Air Quality			Х		Х	
Biological Resources				Х	X	
Cultural Resources				Х	Х	
Efficiency				Х		
Facility Design					Х	
Geological and Paleontological Resources				Х	X	
Hazardous Materials Management			Х		X	
Land Use				Х	X	
Noise and Vibration			Х		X	
Public Health			Х		Х	
Reliability				Х		
Socioeconomics				Х		
Soil and Water Resources				Х	Х	
Traffic and Transportation			Х		Х	
Transmission Line Safety and Nuisance				Х	X	
Transmission System Engineering					Х	
Visual Resources				Х	Х	
Waste Management				Х	Х	
Worker Safety and Fire Protection			Х		Х	

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

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

The proposed modifications would increase the capacity of the existing power plant (from 585 MW to 596 MW nominal) but would reduce from the capacity (635 MW) previously approved as part of the "Sunrise Improvement Project" (TN# 248167) in 2022. The 2022 CEC approval of the "Sunrise Improvement Project" allowed for a small increase in hourly emissions of sulfur oxides (SOx), nitrogen oxides (NOx), volatile organic compounds (VOC), and carbon monoxide (CO) and a minor daily increase in SOx emissions due to increased fuel input with revised conditions of certification. Emissions of the proposed modifications of this current request are expected to stay below the limits approved in 2022. Air quality impacts would remain less than significant with existing conditions of certification. The project would remain in compliance with all applicable LORS related to air quality.

BIOLOGICAL RESOURCES

The proposed modifications would occur within the fenced facility. This area has been previously disturbed and developed. No habitat or vegetation would be disturbed. Therefore, the proposed project changes would not affect biological resources or require any changes to the existing biological resources conditions of certification. The project would remain in compliance with all applicable LORS related to biological resources.

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 or tribal cultural resources or require any changes to the existing Cultural Resources COCs. The proposed modification would remain in conformance with applicable LORS concerning cultural and tribal cultural resources.

EFFICIENCY

The hot gas path and control system upgrade would slightly increase the nominal turbine rating, capacity output, and efficiency. The increase in the power plant's maximum net output at the interconnection point would be 11 MW (from 585 MW to 596 MW nominal). No LORS apply to power plant efficiency. 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. The project would remain in compliance with all applicable LORS related to the facility design.

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

This Petition to Amend (PTA) proposes to replace and recondition select combustion and turbine equipment of the Sunrise Power Project (SPP). According to the Summary of Received Petition prepared by CEC staff, the proposed modification would not result in any ground disturbance and therefore geological and paleontological resources would not be impacted. The modification would conform to applicable LORS related to paleontological resources and changes to the existing COCs would not be required.

HAZARDOUS MATERIALS MANAGEMENT

The proposed modifications to select combustion and turbine upgrade of hardware would not involve extremely hazardous materials during construction. Hazardous materials such as gasoline, solvents, lubricants, paints, and welding gases would be used in minimal quantities during the construction phase. Hazardous materials would be stored, handled, and used in accordance with applicable LORS. When not in use, any hazardous materials would be stored in designated construction areas in compliance with LORS. Compliance with applicable LORS would ensure that impacts related to hazardous materials management would be less than significant. Therefore, the proposed project modification would have a less than significant impact to the offsite public or the environment.

LAND USE

The proposed modifications to select combustion and turbine upgrade of hardware are equivalent to maintenance and software update activities. All installation activities would take place within SPP's turbine. The proposed modifications would not affect land use or require any changes to the existing land use conditions of certifications. The project would remain in compliance with all applicable LORS related to land use.

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. The project would remain in compliance with all applicable LORS related to noise and vibration.

PUBLIC HEALTH

The 2022 staff analysis (<u>TN# 247611</u>) concludes that the Public Health impacts from the capacity increase would be less than significant. Emissions from the proposed modifications of this current request are expected to stay below the limits approved in 2022. Therefore, the Public Health impacts from the proposed modifications would be less than significant with existing conditions of certification. The project would remain in compliance with all applicable LORS related to public health.

RELIABILITY

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

SOCIOECONOMICS

The proposed modifications to select combustion and turbine upgrade of hardware are equivalent to maintenance and software upgrade activities. SPP operations and maintenance staff would install the hardware so no new workforce employees would be retained by the project owner. Therefore, the proposed project modifications would not affect socioeconomics or require any changes to the existing socioeconomics conditions of certification.

SOIL AND WATER

This Petition to Amend (PTA) proposes to replace and recondition select combustion and turbine equipment of the Sunrise Power Project (SPP). According to the Summary of Received Petition prepared by CEC staff, the proposed modification would not result in any ground disturbance and therefore soil and water resources would not be impacted. The project would conform to applicable LORS related to soil and water resources and no changes to the existing COCs would be required.

TRAFFIC AND TRANSPORTATION

The proposed modifications to select combustion and turbine upgrade of hardware are equivalent to maintenance and software upgrade activities. These activities would not create more traffic above the existing background traffic identified in the Decision.

Therefore, the proposed project modifications would not affect traffic and transportation or require any changes to the existing traffic and transportation conditions of certification. The project would remain in compliance with all applicable LORS related to traffic and transportation.

TRANSMISSION LINE SAFETY AND NUISANCE

The proposed project modifications will not affect transmission line safety or create nuisance issues. The increase in the plant's capacity from 585 MW to 596 MW can be reliably transmitted to the California Independent System Operator (CAISO)-controlled grid without requiring additional transmission facilities that could impact the environment. The necessary upgrades are confined within the existing facilities' boundaries, ensuring that transmission safety and nuisance conditions remain unchanged. The project will continue to comply with the existing conditions of certification related to transmission line safety, and no additional significant impacts are expected. The project would remain in compliance with all applicable LORS.

TRANSMISSION SYSTEM ENGINEERING

The SPP PTA proposed to replace a section of the combustion turbine with improved technology, improved combustion system, and to upgrade the turbine generator control system. The replacement and improvement would increase the plant output from 585 MW to 596 MW. The additional power output to the existing transmission grid was approved by the California ISO that the total SPP generation would not exceed the approved capacity of 600 MW.

The proposed improvement and upgrade would not cause additional downstream transmission impacts other than those identified in the approved SPP. The project would comply with applicable LORS and would not require a change to any of the COCs.

VISUAL RESOURCES

Installation of the proposed modifications to select combustion and turbine upgrade of hardware would take place within an existing combustion turbine, therefore the proposed project modifications would not affect visual resources or require any changes to the existing visual resources COCs. The project would remain in compliance with all applicable LORS.

WASTE MANAGEMENT

This PTA proposes to replace and recondition select combustion and turbine equipment of the SPP. According to the PTA, the proposed modification would not result in any ground disturbance. No new waste streams would be created. Quantities of solid waste generated would not significantly change from ongoing operations. Therefore, the proposed project modifications would not affect waste management, require any

changes to the existing Waste Management conditions of certification, and would conform to applicable LORS.

WORKER SAFETY AND FIRE PROTECTION

During the proposed installation of the modifications to select combustion and turbine upgrade of hardware, continued compliance with existing COC **SAFETY-1** would ensure that the proposed project modification would comply with applicable LORS. Therefore, the proposed project modification would have a less than significant impact to worker health and safety or the offsite public.

CALENVIROSCREEN 4.0

Staff reviewed CalEnviroScreen 4.0 data to determine whether the United States census tract where the Sunrise Power Project is located (06029003304) 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 80.87 and, thus, is identified as a disadvantaged community.

ENVIRONMENTAL 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.

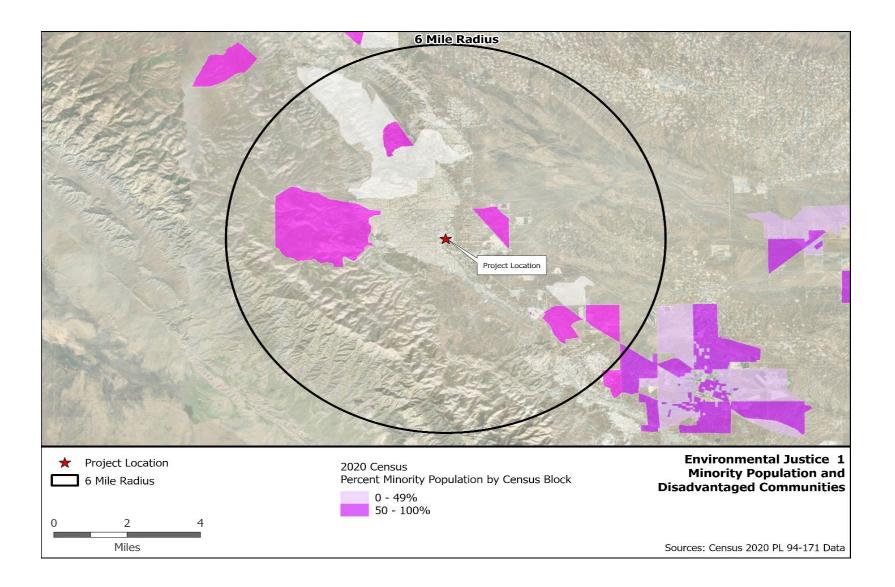
Based on California Department of Education data in the **Environmental Justice Table 1**, staff concluded that the percentage of those living in the Atascadero Unified, Midway Elementary, and McKittrick Elementary school districts (in a six-mile radius of the project site) and enrolled in the free or reduced-price meal program is less 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.

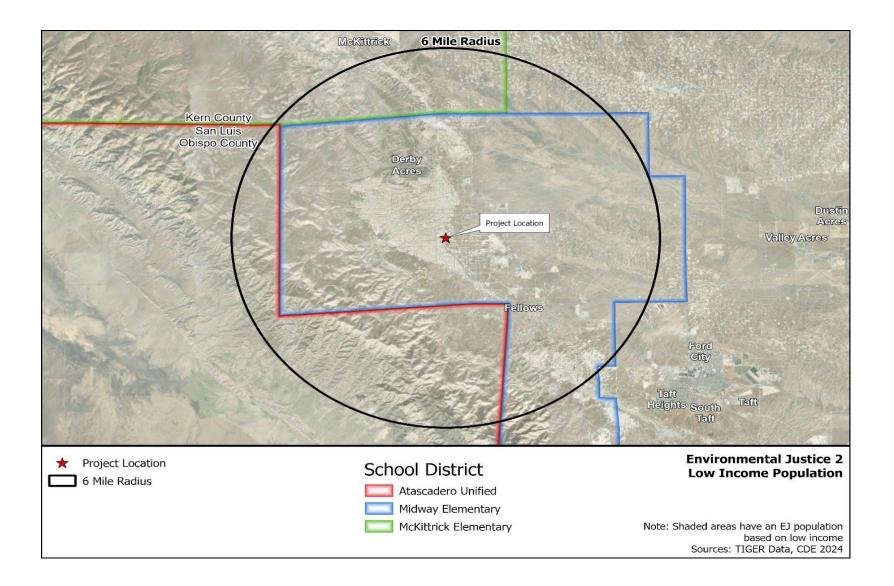
	Enrollment Used for Meals	Free or Reduced Price Meals					
McKittrick Elementary	69	25	36.2%				
Midway Elementary	67	42	62.7%				
REFERENCE GEOGRAPHY							
Kern County	198,315	152,211	76.8%				
SAN LUIS OBISPO SCHOOL DISTRICT IN SIX-MILES RADIUS	Enrollment Used for Meals	Free or Reduced Price Meals					
Atascadero Unified	4,338	2,088	48.1%				
REFERENCE GEOGRAPHY							
San Luis Obispo County	32,607	17,403	53.4%				
Source: CDE 2024. California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2023-2024, http://dq.cde.ca.gov/dataquest/.							

Environmental Justice – Table 1 Low Income Data within the Project Area

Environmental Justice Conclusions

For this petition, the following technical areas considered 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. 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, Figure 2**, and **Table 1**. Impacts to the EJ population are less than significant.





CEC STAFF DETERMINATION

Staff has determined that the petition meets the criteria for approval by staff, and therefore, submission to the CEC for approval is not required. Specifically, based on the environmental and other analysis set forth above, staff has determined the proposed changes described in the petition, meet the following requirements:

- 1. There is no possibility that the change may have a significant impact on the environment, or the change is exempt from the California Environmental Quality Act;
- 2. The changes would not cause the project to fail to comply with any applicable laws, ordinances, regulations, or standards;
- 3. The changes will not require a change to, or deletion of, a condition of certification adopted by the Commission in the final decision or subsequent amendments; and
- 4. Regarding the changes to the air quality conditions of certification, no daily, quarterly, annual or other emission limit will be increased as a result of the change.

Staff also concludes that none of the findings specified in section 1748(b) apply to the proposed changes and 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 and California Code of Regulations, tit. 14, section 15162.

WRITTEN COMMENTS

This statement of staff summary and approval of the proposed project changes has been filed in the docket for this project. Pursuant to California Code of Regulations, title 20, section 1769(a)(3)(C), any person may file an objection to the CEC staff's determination within 14 days of the filing of this statement on the grounds that the project change does not meet the criteria set forth in sections 1769(a)(3)(A) or (a)(3)(B). Absent any objections as specified in section 1769(a)(3)(C), this petition will be approved 14 days after this statement is filed.

The CEC's project webpage, https://www.energy.ca.gov/powerplant/simplecycle/sunrise-power-project, has a link to the petition and this Statement of Staff Approval on the right side of the webpage in the box labeled "Compliance Proceeding." Click on the "Docket Log (98-AFC-04C)" option.

Written comments or objections to staff's determination may be submitted using the CEC's e-Commenting feature, as follows: Go to the <u>CEC's project webpage</u> and click on either the "Comment on this Proceeding," or "<u>Submit e-Comment</u>" link. When your comments are filed, you will receive an email with a link to them.

Written comments or objections may also be mailed to:

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

All comments and materials filed with the Docket Unit will be added to the facility Docket Log and be publicly accessible on the <u>CEC's project webpage</u>.

If you have questions about this document, please contact Compliance Project Manager Ashley Gutierrez, Compliance Monitoring and Enforcement Unit, Safety and Reliability Branch, at (916) 839-0400, or via email at <u>Ashley.Gutierrez@energy.ca.gov</u>.

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 <u>publicadvisor@energy.ca.gov</u>.

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