



**DATE:** April 22, 2022  
**TO:** Interested Parties  
**FROM:** Mary Dyas, Compliance Project Manager  
**SUBJECT: LA PALOMA GENERATING PLANT (98-AFC-02C)  
Staff Analysis of Post Certification Petition and Staff  
Recommendation**

On February 8, 2022, CXA La Paloma, LLC, the project owner, filed a post certification petition (petition), [TN 241487](#), with the California Energy Commission (CEC) to modify the La Paloma Generating Plant (LPGP).

LPGP is a 1,048-megawatt combined-cycle, natural gas project that was certified in October 1999 and began commercial operations in January 2003. The power plant is located east of the community of McKittrick in Kern County.

### **Description of Proposed Change**

The project owner is seeking approval to install a diesel-fired emergency standby electrical generator to power the existing West Kern Water District pump station water pumps for process/cooling water at the LPGP in the event of electrical grid power loss.

### **CEC Staff Review and Conclusions**

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(a)(4), CEC staff (staff) has reviewed the petition for potential environmental effects; consistency with applicable laws, ordinances, regulations, and standards (LORS); and LPGP's conditions of certification. Based on staff's analysis, contained below, staff has determined the modified LPGP (1) would not have a significant effect on the environment, (2) would continue to comply with the applicable LORS, and (3) would not require a change to, or deletion of, any conditions of certification as adopted in the Final Commission Decision (Decision) 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 LPGP (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 addition of new Conditions of Certification AQ-EG1 through AQ-EG16 for consistency with the new Authority to Construct permit issued by the San Joaquin Valley Air Pollution Control District to make the effect on the environment less than significant.

Lastly, staff concludes the proposed change does not meet the criteria requiring the production of subsequent or supplemental review consistent with California Code of Regulations, title 14, section 15162(a).

Staff concludes that, with the adoption of the recommendations in the analysis below, LPGP would remain in compliance with applicable LORS, and the proposed changes to LPGP would not result in any significant adverse direct, indirect, or cumulative impacts to the environment.

Staff intends to recommend approval of the petition at the May 11, 2022, Business Meeting of the CEC.

The [CEC's project webpage](https://www.energy.ca.gov/powerplant/combined-cycle/la-paloma-generating-plant), <https://www.energy.ca.gov/powerplant/combined-cycle/la-paloma-generating-plant>, 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 \(98-AFC-02C\)](#)" 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 General Siting 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 comment on the analysis are asked to submit their comments by May 6, 2022. Comments will also be accepted during the scheduled business meeting. To use 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-02C  
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 become publicly accessible on the CEC's webpage for the facility.

If you have questions about this notice, please contact Mary Dyas, Office of Compliance Monitoring and Enforcement, Compliance Project Manager, at (916) 628-5418 or via email at [mary.dyas@energy.ca.gov](mailto: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](mailto:publicadvisor@energy.ca.gov).

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

Mail List: 713  
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**LA PALOMA GENERATING PLANT (98-AFC-02C)**  
**Petition to Amend Final Commission Decision**  
**EXECUTIVE SUMMARY**

Mary Dyas

## **INTRODUCTION**

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On February 8, 2022, CXA La Paloma, LLC (CXA), the project owner, filed a post-certification petition (petition) ([TN 241487](#)) with the California Energy Commission (CEC) to modify the La Paloma Generating Plant (LPGP).

LPGP is a 1,048-megawatt combined-cycle, natural gas project that was certified in October 1999 and began commercial operations in January 2003. The power plant is located east of the community of McKittrick in Kern County.

The LPGP consists of four combustion turbine generators, four heat recovery steam generators and exhaust stacks, and four steam turbines. California Aqueduct water from the WKWD supplies the project water via an eight-mile pipeline.

## **DESCRIPTION OF PROPOSED CHANGE**

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The project owner is seeking approval to install a diesel-fired emergency standby electrical generator (genset) to power the existing West Kern Water District (WKWD) pump station water pumps for process/cooling water at the LPGP in the event of electrical grid power loss. Staff has completed its review of all materials received.

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 CHANGES**

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The primary purpose and need for this amendment is to enable the facility to continue generating power to the California Independent System Operator grid.

The plant requires approximately 5,500 acre-feet of water annually for cooling and process operations, which is supplied by the WKWD. The WKWD currently pumps water from the California Aqueduct via an eight-mile-long pipeline and pump station to the LPGP. The electric pump is currently operated exclusively with grid power. Whenever grid power is interrupted, direct pumping of water stops and LPGP has less than eight hours of operating process/cooling water stored on site.

## **STAFF REVIEW AND CONCLUSIONS**

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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(a)(4), CEC staff (staff) has reviewed the petition for potential environmental effects; consistency with applicable laws, ordinances, regulations, and standards (LORS); and LPGP's conditions of certification. Based on staff's analysis, contained below, staff has determined the modified LPGP (1) would not have a significant effect on the environment, (2) would continue to comply with the applicable LORS, and (3) would not require a change to, or deletion of, any conditions of certification as adopted in the Final Commission Decision (Decision) 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 LPGP (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 addition of new Conditions of Certification AQ-EG1 through AQ-EG16 for consistency with the new Authority to Construct permit issued by the San Joaquin Valley Air Pollution Control District to make the effect on the environment less than significant.

Lastly, staff concludes the proposed change does not meet the criteria requiring the production of subsequent or supplemental review consistent with California Code of Regulations, title 14, section 15162(a).

## **ENVIRONMENTAL SETTING**

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Staff reviewed CalEnviroScreen 4.0 data to determine whether the United States census tract where the LPGP and WKWD pump station are 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<sup>1</sup>.

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<sup>1</sup> Source: CalEPA Proposed SB 535 Disadvantaged Communities: October 2021 <https://calepa.ca.gov/envjustice/ghginvest/>

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 LPGP.

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					
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 conditions of certification (COCs). With the addition of Conditions of Certification **AQ-EG1** through **AQ-EG16**, the project would continue to comply with all applicable LORS. The proposed genset 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 LPGP 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 COCs. The basis for each of staff's conclusions are provided below:

### **AIR QUALITY**

Please see attached Air Quality, Public Health, and Greenhouse Gas analyses.

### **BIOLOGICAL RESOURCES**

The construction of the proposed changes would be within the existing WKWD pump station. That site is previously disturbed and is currently covered with pea gravel with various pumps, a transformer, an underground vault, an air bladder, and an unstaffed control room surrounded by a seven-foot-tall brick wall with two locked chain-link gates. No habitat or vegetation would be disturbed. Therefore, the proposed changes would not affect biological resources or require any changes to the existing biological resources conditions of certification. LPGP would remain in compliance with all applicable LORS related to biological resources.

### **CULTURAL RESOURCES**

There are no known cultural resources on the LPGP site that could be impacted by the proposed changes. Portions of the pump station were previously excavated to a maximum depth of 18 feet, and the entire facility was graded and then covered in an inch of gravel; however, new proposed ground disturbance could still unearth previously unknown buried cultural resources (CEC and Stantec Consulting Services Inc. 2022). If cultural resources are encountered during the installation of the genset for the water pump, the implementation of Conditions of Certification CUL-1 through CUL-16 in Decision would mitigate any potentially significant impacts during construction and ensure the treatment of any discovered resources would conform to the standards in Kern County's General Plan, Chapter 1.10.3 (Kern County 2009). Although state and local LORS have been updated since the Decision in 1999 (CEC 1999), LPGP would remain in compliance with LORS as they pertain to cultural resources. No changes to the conditions of certification are required for this proposed change. Conditions of Certification CUL-1 through CUL-16, applicable to this proposed change, were developed to ensure that, if cultural resources are encountered during construction, adequate measures are in place to mitigate any project-level impacts to less than significant.

## **EFFICENCY**

This petition would not impact the thermal efficiency of the LPGP power plant.

## **FACILITY DESIGN**

The proposed modifications would include the installation of a Caterpillar 1.25-MW Tier 2 diesel-fired genset, a double-walled diesel storage tank and secondary tank, and a Conex container that would provide sound mitigation and security. The genset would be located at the existing WKWD site and would be used to power the water pumps for processing/cooling water at the LPGP in the event of a grid power loss. These modifications must be in accordance with the 2019 edition of the California Building Standards Code. The implementation of the existing Facility Design conditions of certification adopted in the Decision and construction compliance oversight by the CEC's delegate chief building official would ensure this compliance.

## **GEOLOGICAL AND PALEONTOLOGICAL RESOURCES**

There is no impact with respect to geology from this proposed change. No changes to the existing geology conditions of certification are required. Continued compliance with existing conditions of certification ensures LPGP would not have a significant impact.

No impact is determined since no paleontological resources will be disturbed by the proposed activities. No intact soils are to be disturbed by the implementation of the proposed activities; therefore, paleontological resources will not be impacted.

## **HAZARDOUS MATERIALS MANAGEMENT**

During the installation of the new diesel genset, continued compliance with existing Condition of Certification HAZ-1 ensures the proposed change would not have a significant impact on the off-site public or the environment, and LPGP would continue to comply with all applicable LORS.

## **LAND USE**

The installation of the genset would be at the WKWD pump site within an existing developed agricultural zoned area of Kern County. The existing pump station is an approved use pursuant to Kern County zoning. The addition of the genset would be subservient to the pump station use by ensuring the continuous generation of power at the LPGP by preventing a disruption in the delivery of water to the facility during grid power interruptions, which have become more frequent than when LPGP was originally licensed. The genset would be installed on disturbed land within the existing pump site boundary. There is no land use related conditions of certification applicable to the change in the Decision, and the LPGP would continue to comply with LORS. The proposed change would not physically divide an established community or cause a significant environmental impact due to a conflict with LORS adopted for the purpose of avoiding or mitigating an environmental effect. Further, the proposed change would not

result in the conversion of Farmland or forest land or conflicts with agricultural operations. Therefore, the impacts to land use would be less than significant.

## **NOISE AND VIBRATION**

The installation activities associated with this petition would be temporary and would occur during daytime hours. Any noise generated during these activities would be temporary, intermittent, and consistent with Kern County Municipal Code, Noise Control (Chapter 8.36.020). The nearest sensitive receptors (residences) are approximately 9,050 feet north-northeast from the site. This work would result in a less –than significant impact with the implementation of the existing Noise conditions of certification in the Decision.

The genset would only operate up to 50 hours per year for maintenance and testing purposes. The entire genset and tank skid would be enclosed in a Conex container and the entire site is surrounded by a seven-foot-tall brick wall. Since the nearest sensitive receptors (residences) are approximately 9,050 feet from the LPGP site, they would not be affected by operational noise as the result of this petition.

## **PUBLIC HEALTH**

Please see attached Air Quality, Public Health, and Greenhouse Gases analyses.

## **RELIABILITY**

The installation of the genset would allow the water pumps at the LPGP to continue to operate during grid power loss to WKWD. This would allow continuous power generation by LPGP. Without this backup power, LPGP would need to shut down within eight hours of power loss to WKWD. When LPGP was originally permitted, there were few power interruptions at the WKWD pump station. However, the interruptions have become more frequent. This genset would help LPGP restore its reliability level to when LPGP first became operational.

## **SOCIOECONOMICS**

The installation activities for the genset at the WKWD pump site would be minor as the entire genset and tank skid would be enclosed in a Conex container and would not require groundbreaking activities. The modification would not require any changes in the operations workforce. The genset would be screened from view and secured by the existing seven-foot-tall brick wall with two locked chain-link gates for access. The site has a 24-hour remote-accessed security system, including a camera, laser barriers, visual light, and audio system that are monitored and alarmed at the main LPGP control room and by an off-site security company. There are no socioeconomics-related LORS or conditions of certification applicable to the proposed change, and there would be less than significant workforce-related impacts on population and housing, and on public services.

## **SOIL AND WATER RESOURCES**

The proposed modifications would be performed in previously disturbed and developed areas. The proposed changes would not result in an increase in water demand or generate stormwater runoff that could impact the water quality of receiving waters. Therefore, the proposed modification would have no impacts on water resources. LPGP would remain in compliance with all applicable LORS and would not require a modification of any conditions of certification related to water resources.

The proposed modifications would be performed in previously disturbed and developed areas. Therefore, the proposed modification would have no impacts on soil resources. The project would remain in compliance with all applicable LORS and would not require a modification of any conditions of certification related to soil resources.

## **TRAFFIC AND TRANSPORTATION**

The installation activities for the genset at the WKWD pump site would be minor as the genset and tank skid would be enclosed in a Conex container and would not require groundbreaking activities within the existing facility. The proposed modification would not require any changes in operations workforce. The operation of the modified LPGP would result in a minor increase of LPGP employee vehicle trips to the WKWD pump site for the monthly maintenance and testing of the genset. The installation and operation of the genset would comply with all applicable LORS and be ensured by existing conditions of certification in the Decision including TRANS-1 (oversized and overweight transportation permits) and TRANS-3 (hazardous substance transportation permits). The proposed change would not conflict with LORS addressing the circulation system, substantially increase hazards, or result in inadequate emergency access. Therefore, the installation of the genset would have less than significant impacts to transportation.

## **TRANSMISSION LINE SAFETY AND NUISANCE**

The proposed modifications would not change the transmission line safety and nuisance staff analysis nor 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 proposed installation of a genset for the pump station does not include activities that would affect the transmission lines and would not impact the transmission grid. Therefore, there will be no impacts to the transmission system engineering. In addition, LPGP will comply with applicable LORS and will not require a change to any of the conditions of certification.

## **VISUAL RESOURCES**

The genset would be installed on disturbed land within WKWD pump site boundary. The genset and tank skid would be enclosed in a Conex container that would be painted to match the surrounding existing infrastructure. The installation would be screened from public view by the pump site's existing surrounding seven-foot brick wall with locked chain-link gates for access. LPGP would remain in compliance with LORS pertaining to visual resources. With the implementation of existing conditions of certification from the Decision, VIS-1 (non-reflective surface treatments of structures) and VIS-3 (shielded and directional exterior lighting), the requested change would not have a substantial adverse effect on a scenic vista, scenic resources, the existing visual character, or quality of public views of the LPGP site and its surroundings or create a new source of substantial light or glare adversely affecting day or nighttime views in the area. Therefore, the installation of the genset would have less than significant impacts to visual resources.

## **WASTE MANAGEMENT**

The proposed change would not create a new solid waste stream. Continued compliance with existing conditions of certification ensures LPGP would not have a significant impact.

## **WORKER SAFETY AND FIRE PROTECTION**

During the installation of the genset, continued compliance with existing Condition of Certification SAFETY-1 ensures LPGP would not have a significant impact on worker health and safety and would comply with all applicable LORS.

## **ENVIRONMENTAL JUSTICE**

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**Environmental Justice – Figure 1** shows 2020 census blocks in the six-mile radius of the WKWD pump station 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 farthest 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 Buttonwillow Union Elementary School District (in a six-mile radius of the WKWD pump station) and

enrolled in the free or reduced-price meal program is larger than those in the reference geography. Thus, it is 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 WKWD pump station.

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

<b>School Districts in Six-Mile Radius</b>	<b>Enrollment Used for Meals</b>	<b>Free or Reduced-Price Meals</b>	
Buttonwillow Union Elementary	308	275	89.3%
REFERENCE GEOGRAPHY			
Kern County	195,310	139,874	71.6%

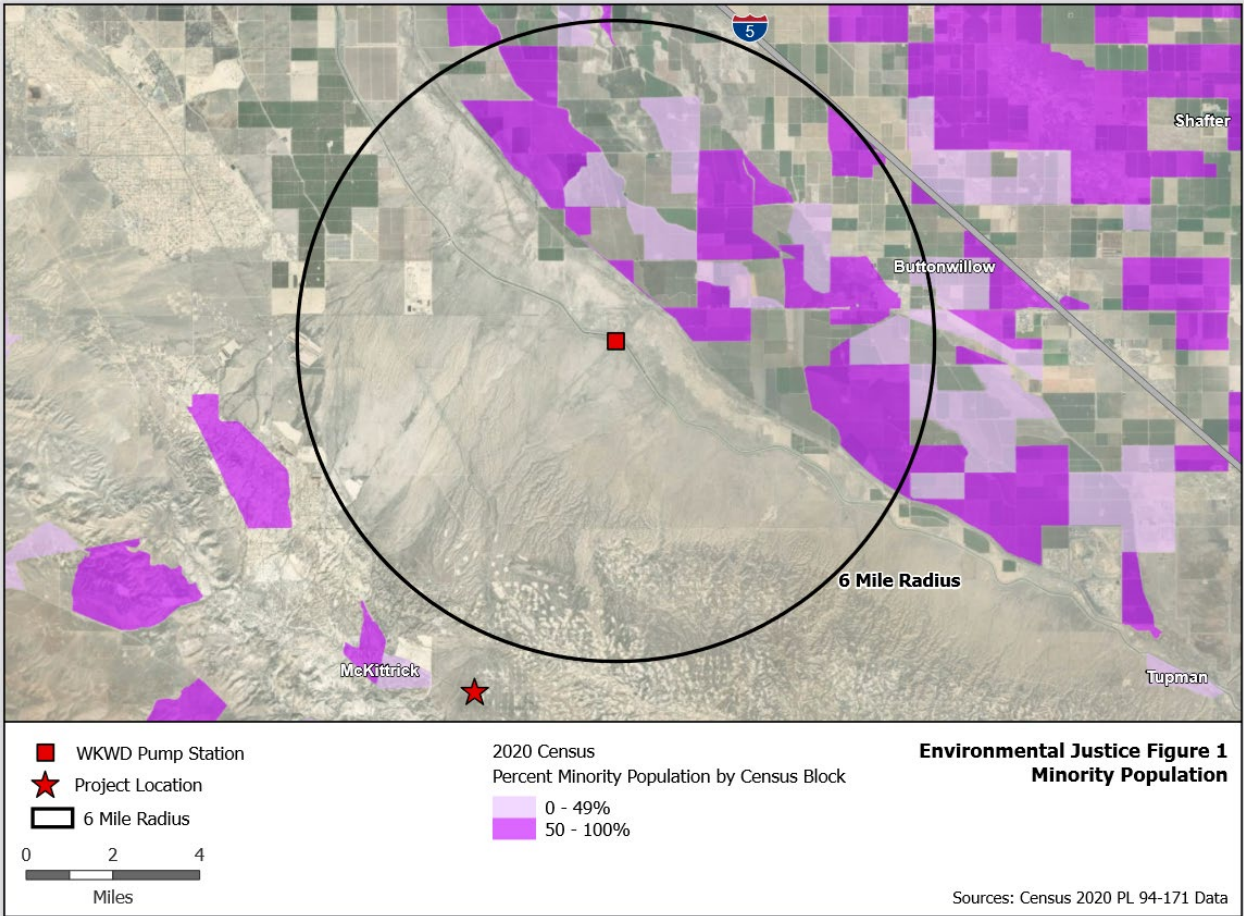
Source: CDE 2021. California Department of Education, DataQuest, Free or Reduced-Price Meals, District level data for the year 2020-2021. Available online at: <http://dq.cde.ca.gov/dataquest/>

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 the technical areas affected by the proposed project changes – Air Quality, Cultural Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Visual Resources, and Worker Safety and Fire Protection – 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**. 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 change would not cause significant impacts for any population in the WKWD pump station’s six-mile radius, including the EJ population. The impacts to the EJ population are less than significant.

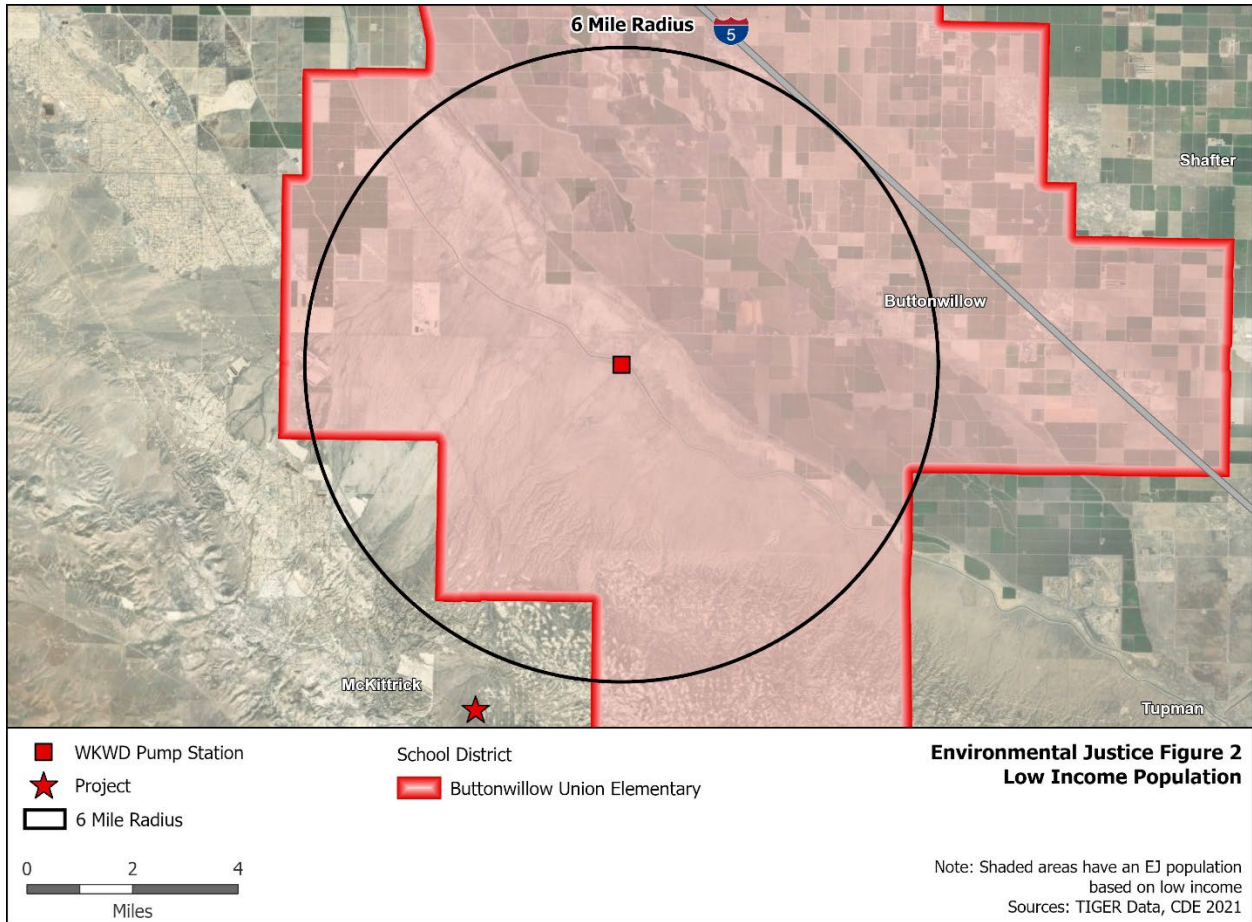
**Environmental Justice – Figure 1: Minority Population**







## Environmental Justice – Figure 2: Low Income Population



## CEC STAFF RECOMMENDATIONS AND CONCLUSIONS

Staff has reviewed the petition pursuant to California Code of Regulations, title 20, section 1769(a)(4). Staff recommends the Commission approve the petition.

Consistent with California Code of Regulations, title 20, section 1769(a)(4), staff has reviewed the petition for potential environmental effects; consistency with applicable LORS; and LPGP's conditions of certification. Staff has determined the modified LPGP (1) would not have a significant effect on the environment, (2) would continue to comply with the applicable LORS, and (3) would not require a change to, or deletion of, any conditions of certification as adopted in the Decision 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 LPGP (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, but with the addition of new Conditions of Certification AQ-EG1 through AQ-EG16 for consistency with the new

Authority to Construct permit issued by the San Joaquin Valley Air Pollution Control District, the effect on the environment would be less than significant.

Staff has determined the findings required pursuant to California Code of Regulations, title 20, section 1748(b) do not apply to this petition.

Lastly, staff concludes the proposed change does not meet the criteria requiring the production of subsequent or supplemental review consistent with California Code of Regulations, title 14, section 15162(a).

## **REFERENCES**

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CEC 1999 – California Energy Commission (TN 35900), *Final Decision: La Paloma Generating Project*. (98-AFC-2) October 1999.

CEC and Stantec Consulting Services Inc. 2022 – California Energy Commission and Stantec Consulting Services Inc., Data Requests and Responses Concerning Cultural Resources, La Paloma Generating Project (98-AFC-02C), Petition for Post-Certification Change Emergency Standby Electrical Generator.

Kern County 2009 – Kern County, *Kern County General Plan*. Chapter 1.10.3 Archaeological, Paleontological, Cultural, and Historical Preservation. September 22, 2009. Available online at:  
[https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP\\_Complete.pdf](https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_Complete.pdf)

Stantec Consulting Services Inc. 2022 – Stantec Consulting Services Inc. (TN 241487), *La Paloma Generating Project Petition for Modification*. February 16, 2022.

**La Paloma Generating Project (98-AFC-02C)**  
**Post-Certification Petition**  
**Air Quality, Public Health, and Greenhouse Gases**  
Wenjun Qian, Ph.D., P.E.

## **INTRODUCTION AND SUMMARY**

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On February 8, 2022, CXA La Paloma, LLC (project owner), submitted a post-certification petition with the California Energy Commission (CEC) to modify the La Paloma Generating Project (LPGP). The project owner proposes to install a diesel emergency standby electrical generator (genset) to power the existing West Kern Water District (WKWD) pump station water pumps for continued process/cooling water delivery to LPGP in the event of electrical grid power loss.

The existing LPGP is a 1,048-megawatt natural gas-fired, combined cycle power plant located in Kern County. The plant requires approximately 5,500 acre-feet of water annually for cooling (steam condensing) and process operations. The WKWD currently pumps water from the California Aqueduct at a pump station and delivers water to LPGP via an eight-mile-long pipeline. The electric pump is currently operated exclusively with grid power. Whenever grid power is interrupted, direct pumping of water stops and LPGP has less than eight hours of full load operating process/cooling water stored on-site. Therefore, the project owner proposes to install a genset at the pump station to power the water pumps when grid power is interrupted.

The project owner also submitted an application for an Authority to Construct (ATC) permit to the San Joaquin Valley Air Pollution Control District (district). The district completed an analysis of the proposed genset and issued a draft ATC on March 14, 2022 (District 2022). CEC staff (staff) reviewed the project owner's petition and the associated district analysis.

The proposed installation of a new genset would result in a small increase in emissions. In this analysis, staff demonstrates that the air quality, public health, and greenhouse gas emissions impacts of the proposed genset would be less than significant.

To incorporate the new district ATC permit conditions for the proposed genset into the CEC license, staff proposes to add new Conditions of Certification AQ-EG1 through AQ-EG16.

The modified LPGP would comply with all laws, ordinances, regulations, and standards (LORS). Air quality, public health, and greenhouse gas emissions 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 LPGP 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 a draft ATC on March 14, 2022, demonstrating that the proposed genset would comply with all applicable LORS. After addressing all comments made during the 30-day public notice period, the district intends to issue the final ATC (District 2022).

**Air Quality Table 1** includes a summary of the air quality LORS relevant to the proposed genset. The proposed new Conditions of Certification AQ-EG1 through AQ-EG16 would ensure that the proposed genset would comply with all LORS.

**Air Quality Table 1  
Laws, Ordinances, Regulations, and Standards**

Applicable LORS	Description	Compliance
<b>State</b>	<b>California Air Resources Board</b>	
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 proposed diesel emergency standby electrical genset would not be located within 1,000 feet of a school. Therefore, pursuant to Health and Safety Code §42301.6, a school notice is not required.
California Code of Regulations (CCR), title 17, section 93115 – Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines	§ 93115.5(a): Emergency engine(s) must be fired on California Air Resources Board (CARB) certified diesel fuel or an approved alternative diesel fuel.	The applicant has proposed the use of CARB certified diesel fuel, which is required in district ATC condition 6. Staff proposes to add the condition as <b>AQ-EG6</b> .
	§ 93115.6(a)(1): Engines, with a particulate matter of 10 micrometers or less in diameter (PM10) emissions rate greater than 0.01 gram per brake horsepower-hour (g/bhp-hr) and located at schools, may not be operated for maintenance and testing whenever there is a school sponsored activity on the grounds. Additionally, engines located within 500 feet of school grounds may not be operated for maintenance and testing between 7:30 AM and 3:30 PM.	The proposed engine would not be located within 500 feet of a school. Therefore, the requirement does not apply to the proposed engine.
	§ 93115.6(a)(3)(A)1: The engine(s) must meet the emission standards in Table 1 of the ATCM for the specific power rating and model year of the proposed engine.	As described below, the district considers a Tier 2 certification level to be the latest available Tier certification level for the proposed engine size, which would guarantee compliance with the emission standards of the ATCM for engines rated greater than 750 bhp (i.e. 0.15 g/bhp-hr for PM, 4.8 g/bhp-hr for non-methane hydrocarbons and

Applicable LORS	Description	Compliance
	<p>nitrogen oxides [NO<sub>x</sub>], and 2.6 g/bhp-hr for carbon monoxide [CO]).</p> <p>§ 93115.6(a)(3)(A)1: The engine may not be operated more than 50 hours per year for maintenance and testing purposes unless the PM emissions are less than or equal to 0.01 g/bhp-hr, then the engine may be allowed to operate up to 100 hours per year, according to § 93115.6(a)(3)(A)2.</p> <p>§ 93115.10(d)(1): A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed upon engine installation, or by no later than January 1, 2005, on all engines subject to all or part of the requirements of sections 93115.6, 93115.7, or 93115.8(a) unless the District determines on a case-by-case basis that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner's or operator's compliance history.</p> <p>§ 93115.10 (f): An owner or operator shall maintain monthly records of the following: emergency use hours of operation; maintenance and testing hours of operation; hours of operation for emission testing; initial start-up testing hours; hours of operation for all other uses; and the type of fuel used. All records shall be retained for a minimum of 36 months.</p>	<p>PM emissions from the proposed engine are certified at 0.04 g/bhp-hr. Therefore, the engine would be allowed to operate up to 50 hours for maintenance and testing purposes. District ATC condition 8 would limit PM emissions to 0.04 g/bhp-hr. District ATC condition 14 would limit maintenance and testing to 50 hours per calendar year. Staff proposes to add these conditions as <b>AQ-EG8</b> and <b>AQ-EG14</b>.</p> <p>District ATC condition 5 would require the installation of a non-resettable hour meter with a minimum display capability of 9,999 hours. Staff proposes to add the condition as <b>AQ-EG5</b>.</p> <p>District ATC condition 13 would require the project owner to maintain monthly records of emergency and non-emergency operation. Staff proposes to add the condition as <b>AQ-EG13</b>.</p>
<b>Local</b>	<b>San Joaquin Valley Air Pollution Control District</b>	
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 that are subject to the district permit requirements and after construction emit or may emit one or more affected pollutant.	The facility is not an existing Major Source and is not becoming a Major Source as a result of the proposed emergency standby electrical genset. Best Available Control Technology (BACT) will be triggered for NO <sub>x</sub> , PM <sub>10</sub> , and volatile organic compounds (VOC) emissions from the proposed genset because the daily emissions would exceed 2.0 pounds per day (lbs/day). The district analysis demonstrated that

Applicable LORS	Description	Compliance
		<p>BACT would be satisfied for NO<sub>x</sub>, PM<sub>10</sub>, and VOC (see more detailed discussion below). Offsets are not required for the proposed engine. Public noticing is required because worst-case daily NO<sub>x</sub> emissions would exceed 100 lbs/day. The district draft ATC includes conditions 6, 7, and 8 to limit the emissions to a level at or below the emissions associated with the maximum design capacity. Staff proposes to add these conditions as <b>AQ-EG6</b>, <b>AQ-EG7</b>, and <b>AQ-EG8</b>. Source testing, monitoring, or reporting would not be required to demonstrate compliance with Rule 2201. The district performed an Ambient Air Quality Analysis (AAQA) and concluded the proposed engine would not cause a violation of an air quality standard for attainment pollutants NO<sub>x</sub>, CO, sulfur oxides (SO<sub>x</sub>) or contribute significantly to the existing violation of the nonattainment pollutants PM<sub>10</sub> or particulate matter of 2.5 micrometers and smaller in diameter (PM<sub>2.5</sub>).</p>
<p>Regulation II – Permits Rule 2410 – Prevention of Significant Deterioration (PSD)</p>	<p>This rule applies to any pollutant regulated under the federal Clean Air Act, except those for which the district has been classified nonattainment.</p>	<p>The facility is not an existing Major Source for PSD. The project’s potential to emit, by itself, will not exceed any PSD major source thresholds. Therefore, Rule 2410 is not applicable, and no further discussion is required.</p>
<p>Regulation II – Permits Rule 2520 Federally Mandated Operating Permits</p>	<p>This rule provides administrative mechanism for permit issuance as well as compliance requirements associated with the Federally Mandated Operating Permits.</p>	<p>Since this facility's potential to emit does not exceed any Major Source thresholds of Rule 2201, this facility is not a Major Source, and Rule 2520 does not apply.</p>
<p>Regulation IV – Prohibitions Rule 4001 New Source Performance Standards (NSPS)</p>	<p>This rule incorporates NSPS from 40 CFR Part 60 Chapter 1; and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.</p>	<p>The district has not been delegated the authority to implement 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Engines requirements for non-Major Sources; therefore, no requirements shall be included on the permit.</p>

Applicable LORS	Description	Compliance
Regulation IV – Prohibitions Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAP)	This rule incorporates the NESHAP from 40 CFR Part 61, Chapter I, Subchapter C and the NESHAP for Source Categories from 40 CFR Part 63, Chapter I, Subchapter C.	The district has not been delegated the authority to implement NESHAP regulations for 40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE) requirements for non-Major Sources; therefore, no requirements shall be included on the permit.
Regulation IV – Prohibitions Rule 4101 Visible Emissions	This rule states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour that is as dark as, or darker than, Ringelmann 1 or 20 percent opacity.	District ATC condition 2 would limit visible emissions to ensure compliance with this rule. Staff proposes to add the condition as <b>AQ-EG2</b> .
Regulation IV – Prohibitions Rule 4102 Nuisance	This rule states that no air contaminant shall be released into the atmosphere that causes a public nuisance.	Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. District ATC condition 1 would ensure compliance with this rule. Staff proposes to add the condition as <b>AQ-EG1</b> .
Regulation IV – Prohibitions Rule 4201 Particulate Matter Concentration	This rule prohibits the discharge of dust, fumes, or total PM into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot (gr/dscf).	The PM emissions of the proposed emergency standby electrical genset would be less than 0.1 gr/dscf, which is equivalent to 0.4 g/bhp-hr. Compliance is expected and district ATC condition 3 would ensure compliance with this rule. Staff proposes to add the condition as <b>AQ-EG3</b> .
Regulation IV – Prohibitions Rule 4701 Internal Combustion Engines - Phase 1	The purpose of this rule is to limit the emissions of NO <sub>x</sub> , CO, and VOC from internal combustion engines.	Compliance with Rule 4702 (as discussed below) will satisfy the requirements of Rule 4701 since emission limits and all other requirements of Rule 4702 are equivalent or more stringent than Rule 4701.
Regulation IV – Prohibitions Rule 4702 Internal Combustion Engines	The purpose of this rule is to limit the emissions of NO <sub>x</sub> , CO, VOC, PM, and SO <sub>x</sub> from internal combustion engines.	To ensure compliance with Rule 4702, the district limits operation, and requires proper maintenance, monitoring, and record keeping of the proposed engine in ATC conditions 5, 9, 10, 11, 12, 13, 14, 15, and 16. Staff proposes to add these conditions as <b>AQ-EG5, AQ-EG9, AQ-EG10, AQ-EG11, AQ-EG12, AQ-EG13, AQ-EG14, AQ-EG15, and AQ-EG16</b> .

Applicable LORS	Description	Compliance
Regulation IV – Prohibitions Rule 4801 Sulfur Compounds	This rule requires that sulfur compound emissions (as sulfur dioxide [SO <sub>2</sub> ]) shall not exceed 0.2 percent by volume.	With the use of CARB certified diesel fuel containing not more than 0.0015 percent sulfur by weight, the SO <sub>2</sub> emissions of the proposed engine would only be 1.0 parts per million by volume (ppmv), which is much less than the limit of 0.2 percent by volume (2,000 ppmv) specified in the rule. Compliance with the rule is expected. District ATC condition 6 requires the use of CARB certified diesel fuel with no more than 0.0015 percent sulfur by weight. Staff proposes to add the condition as <b>AQ-EG6</b> .
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 determined that the total facility prioritization score including this project would be less than or equal to one. Therefore, no further analysis is required to determine the impact from this project and compliance with the district’s Risk Management Policy is expected. District ATC conditions 4, 8, and 14 would ensure compliance with the district’s Risk Management Policy. Staff proposes to add the conditions as <b>AQ-EG4, AQ-EG8, and AQ-EG14</b> .

## ANALYSIS

The project owner is proposing to install an 1,829 bhp Caterpillar Model C32 Tier 2 certified diesel-fired emergency standby internal combustion (IC) engine powering an electrical generator. An accompanying diesel storage tank would also be installed.

### Air Quality

#### *Construction*

The proposed change would require minor land disturbance in order to install the genset at the existing pump station. A concrete pad would be poured to hold the genset and the accompanying diesel storage tank. Staff expects the emissions and impacts during construction would be less than significant with existing Conditions of Certification AQ-C1 and AQ-C2.

#### *Operation*

The proposed 1,829 bhp Caterpillar Model C32 engine would meet Tier 2 emission standards. The latest U.S. EPA Tier certification for engines greater than 750 bhp is Tier



4F. The district currently has existing Tier 4F and numerous Tier 2 diesel-fired IC engines permitted for emergency standby use rated greater than 750 bhp.

Although certain Tier 4F engines may be available, the project owner has provided compelling reasons for the use of Tier 2 engine. The project owner has provided responses it received from various vendors for requests for quotes for Tier 4F engines in the proposed size range (See District 2022, Appendix F for the Engine Vendor Responses). Some vendors did not have Tier 4F engines available in the proposed size range, while other vendors indicated that a Tier 4F engine would not be available for at least 42 weeks. Thus, the district determined that a Tier 4F engine is not available for this proposed change.

The district finds that a Tier 4F emergency IC engine/generator with a rating of approximately 1,829 bhp is not readily available. Consequently, the district considers a Tier 2 certification level to be the latest available Tier certification level for the proposed engine size. Furthermore, a Tier 2 certification level satisfies the stationary ATCM requirement for emergency standby IC engines rated greater than 750 bhp (District 2022).

**Air Quality Table 2** shows the maximum hourly, daily, and annual emissions estimated for the proposed engine. The maximum hourly emissions are based on emission factors and rating of the engine. The maximum daily emissions are conservatively estimated based on 24 hours of operation per day. The maximum annual emissions are based on 50 hours of operation per year.

**Air Quality Table 2**  
**Maximum Hourly, Daily, and Annual Emissions for the Proposed Engine**

<b>Pollutant</b>	<b>Emissions Factor (g/bhp-hr)</b>	<b>Rating (bhp)</b>	<b>Maximum Hourly Emissions (lbs/hr)</b>	<b>Maximum Daily Emissions (lbs/day)</b>	<b>Maximum Annual Emissions (lbs/yr)</b>
NOx	3.74	1,829	15.1	361.9	754
SOx	0.0051	1,829	0.02	0.5	1
PM10/PM2.5	0.04	1,829	0.2	3.9	8
CO	0.52	1,829	2.1	50.3	105
VOC	0.07	1,829	0.3	6.8	14

Sources: District 2022 and CEC staff analysis

The district performed an Ambient Air Quality Analysis (AAQA) and concluded the proposed engine would not cause a violation of an air quality standard for attainment pollutants NOx, CO, SOx or contribute significantly to the existing violation of the nonattainment pollutants PM10 or PM2.5 (District 2022). However, the district's AAQA only evaluated compliance with annual ambient air quality standards (AAQS) since compliance with short-term (i.e., 1-hour, 3-hour, 8-hour, and 24-hour) standards is not

required for an intermittent source, such as the proposed engine, according to District APR 1920.

Staff performed an independent AAQA evaluating the impacts of the proposed engine against all applicable AAQS, including short-term and annual standards. Staff received the district's AAQA modeling files, including five-year (2013-2017) meteorological data and source parameters and modified them to perform the independent analysis. Staff used the maximum hourly, daily, and annual emissions from **Air Quality Table 2** to model the short-term and annual impacts of the proposed engine based on the forms of the AAQS.

**Air Quality Table 3** shows the maximum impacts of the proposed engine compared with limiting standards. The project impact column shows the worst-case impacts of the proposed change from modeling. The background column shows the highest (or three-year averages for the federal 24-hour PM<sub>2.5</sub>, federal 1-hour SO<sub>2</sub>, and federal 1-hour NO<sub>2</sub> standards) of the background concentrations from the last three years of representative data (2018-2020). The background PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are shown in **bold** because they already exceeded the corresponding limiting standards. The limiting standard column combines California Ambient Air Quality Standard (CAAQS) and National Ambient Air Quality Standard (NAAQS), whichever is more stringent.

The background data shown in **Air Quality Table 3** are from multiple stations since not all pollutants are measured at a single location. The PM<sub>10</sub> and PM<sub>2.5</sub> background data are from the Bakersfield-California station, which is about 27 miles east-southeast of the proposed genset location. The CO background data are from the Bakersfield-Muni station, which is about 31 miles east-southeast of the proposed genset location. The NO<sub>2</sub> background data are from the Shafter station, which is about 17 miles northeast of the proposed genset location. The SO<sub>2</sub> background data are from the Fresno-Garland station (the only SO<sub>2</sub> monitoring station in the district), which is about 95 miles north-northwest of the proposed genset location.

For the 1-hour NO<sub>2</sub> CAAQS, staff performed a refined analysis using the U.S. Environmental Protection Agency (EPA) Ambient Ratio Method Version 2 (ARM2) method with a conservative minimum ambient NO<sub>2</sub>/NO<sub>x</sub> ratio of 0.5 and a maximum ambient ratio of 0.9. Staff combined the modeled project impact with hourly concurrent background NO<sub>2</sub> data from the Shafter-Walker Street monitoring station to estimate the total impacts. For the 1-hour NO<sub>2</sub> NAAQS, staff's analysis is based on assuming continuous operation at an average hourly emission rate calculated from the annual emissions divided by 8,760 hours per year, which is consistent with U.S. EPA guidance (U.S. EPA 2011).

**Air Quality Table 3**  
**Maximum Ambient Air Quality Impacts during Operation ( $\mu\text{g}/\text{m}^3$ )**

Pollutant	Averaging Time	Project Impact	Background	Total Impact	Limiting Standard	Percent of Standard
PM10	24-hour	1.71	<b>196.8</b>	<b>198.5</b>	50	<b>397%</b>
	Annual	0.0012	<b>46.0</b>	<b>46.0</b>	20	<b>230%</b>
PM2.5	24-hour	1.00 <sup>a</sup>	<b>63.9</b>	<b>64.9</b>	35	<b>186%</b>
	Annual	0.0012	<b>19.7</b>	<b>19.7</b>	12	<b>164%</b>
CO	1-hour	69.63	2,175.9	2,245.5	23,000	10%
	8-hour	45.30	1,832.3	1,877.6	10,000	19%
NO <sub>2</sub>	State 1-hour	--	--	263.2 <sup>b</sup>	339	78%
	Federal 1-hour	2.86 <sup>c</sup>	67.1	70.0	188	37%
	Annual	0.11	18.8	18.9	57	33%
SO <sub>2</sub>	State 1-hour	0.68	42.4	43.1	655	7%
	Federal 1-hour	0.68	14.8	15.5	196	8%
	24-hour	0.22	6.8	7.0	105	7%
	Annual	0.00015	1.6	1.6	80	2%

Sources: CARB 2022a, CARB 2022b, District 2022 with modeling files, U.S. EPA 2011, U.S. EPA 2022 and CEC staff analysis

Notes: Concentrations in **bold** type are those that exceed the limiting ambient air quality standard.

<sup>a</sup> The modeled 24-hour PM2.5 project impacts are the 5-year average 98th percentile concentration.

<sup>b</sup> The 1-hour NO<sub>2</sub> CAAQS impacts are evaluated using the U.S. EPA Ambient Ratio Method Version 2 (ARM2) method with a conservative minimum ambient NO<sub>2</sub>/NO<sub>x</sub> ratio of 0.5 and a maximum ambient ratio of 0.9. The modeled project impacts are combined with hourly concurrent background NO<sub>2</sub> data from the Shafter-Walker Street monitoring station to estimate the total impacts.

<sup>c</sup> The 1-hour NO<sub>2</sub> NAAQS project impact is modeled based on assuming continuous operation at an average hourly emission rate calculated from the annual emissions divided by 8,760 hours per year, which is consistent with U.S. EPA guidance (U.S. EPA 2011).

**Air Quality Table 3** shows that the proposed engine would not cause exceedances of the CO, NO<sub>2</sub>, or SO<sub>2</sub> standards. **Air Quality Table 3** also shows that the existing PM10 and PM2.5 background concentrations are already above the limiting standards. The proposed engine would, therefore, contribute to existing exceedances of the PM10 and PM2.5 standards. However, the modeled PM10 project impacts are below the U.S. EPA PM10 Significant Impact Levels (SILs) of 5  $\mu\text{g}/\text{m}^3$  for 24-hour impacts and 1  $\mu\text{g}/\text{m}^3$  for annual impacts. The modeled PM2.5 project impacts are below the U.S. EPA PM2.5 SILs of 1.2  $\mu\text{g}/\text{m}^3$  for 24-hour impacts and 0.2  $\mu\text{g}/\text{m}^3$  for annual impacts. Therefore, the proposed engine would not contribute significantly to the existing violation of the nonattainment pollutants PM10 or PM2.5. The conclusion of staff's independent analysis agrees with the conclusion of the district analysis.

## **Public Health**

Staff expects the public health impacts during construction would be less than significant due to limited construction activities and a 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 total facility prioritization score, including the proposed engine, would be less than or equal to one. Therefore, it is expected the LPGP facility would not significantly impact receptors. No further health risk assessment is required to determine the impact from this proposed change and compliance with the district's Risk Management Policy is expected. Staff expects the public health impacts of the testing and emergency operation of the proposed engine would be less than significant.

## **Greenhouse Gases**

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

On December 17, 2009, the district adopted the *District Policy (APR 2005) – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The adopted policy establishes the use of performance-based standards, otherwise known as Best Performance Standards (BPS), as a means of determining the cumulative significance of project specific GHG emissions on global climate change. In addition, the district policy APR 2015 establishes a level of 230 metric tons of CO<sub>2</sub>e per year (MTCO<sub>2</sub>e/yr), below which project-specific increases in GHG emissions are considered equivalent to zero for district permitting purposes.

The project owner estimated that the GHG emissions of the proposed genset would be about 52 tpy of CO<sub>2</sub>e, which is equivalent to about 47 MTCO<sub>2</sub>e/yr, assuming the allowable maximum of 50 hours of maintenance and readiness testing per year (CEC 2022). The GHG emissions of the proposed emergency standby electrical genset would be considered equivalent to zero pursuant to district policy APR 2015. The GHG impacts of the proposed genset would be less than significant.

## **Proposed Changes to the Conditions of Certification**

The district has issued a draft ATC permit for the proposed genset. To incorporate the new district ATC permit conditions, staff, after conducting its own analysis to confirm the district's analysis, proposes to add Conditions of Certification AQ-EG1 through AQ-EG16.

## **CONCLUSIONS**

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With the addition of Air Quality Conditions of Certification AQ-EG1 through AQ-EG16, the project would continue to comply with all applicable LORS. The proposed genset

would not result in significant impacts to ambient air quality, public health, or greenhouse gases.

## **AMENDED CONDITIONS OF CERTIFICATION**

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

### **EQUIPMENT DESCRIPTION:**

#### **1,829 BHP (INTERMITTENT) CATERPILLAR MODEL C32 TIER 2 CERTIFIED DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR**

**AQ-EG1 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 CEC upon request.**

**AQ-EG2 No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]**

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

**AQ-EG3 Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]**

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

**AQ-EG4 The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]**

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

**AQ-EG5 This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the district determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or**

**operator's compliance history. [District Rule 4702 and 17 CCR 93115]**

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

**AQ-EG6 Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115]**

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

**AQ-EG7 Emissions from this IC engine shall not exceed any of the following limits: 3.74 g-NOx/bhp-hr, 0.52 g-CO/bhp-hr, or 0.07 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]**

**Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation reports specified in Condition AQ-28.**

**AQ-EG8 Emissions from this IC engine shall not exceed 0.04 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102, and 17 CCR 93115]**

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

**AQ-EG9 This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]**

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

**AQ-EG10 During periods of operation for maintenance, testing, and required regulatory purposes, the project owner shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]**

**Verification: The project owner shall submit to the District and Compliance Program Manager (CPM) at CEC engine operation procedures and data**

**demonstrating compliance with this condition as part of the quarterly operation reports specified in Condition AQ-28.**

**AQ-EG11 An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the project owner. [District Rule 4702 and 17 CCR 93115]**

**Verification: No verification necessary.**

**AQ-EG12 This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702 and 17 CCR 93115]**

**Verification: The project owner shall submit to the District and CPM at CEC engine operation procedures and data demonstrating compliance with this condition as part of the quarterly operation reports specified in Condition AQ-28.**

**AQ-EG13 The project owner shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]**

**Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation reports specified in Condition AQ-28.**

**AQ-EG14 This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 50 hours per calendar year. [District Rules 2201, 4102, and 4702, and 17 CCR 93115]**

**Verification: A summary of significant operation and maintenance events and monitoring records required shall be included in the quarterly operation reports specified in Condition AQ-28.**

**AQ-EG15 The project owner shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]**

**Verification: The project owner shall maintain a fuel purchase and consumption log on site for inspection by the District, CARB, and the CEC.**

**AQ-EG16 All records shall be maintained and retained on-site for a minimum of five (5) years and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]**

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

## **REFERENCES**

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