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Project Title:	Magnolia Power Project-Compliance
TN #:	266274
Document Title:	Magnolia Power Plant (01-AFC-06C) CEC Staff Analysis of Petition to Amend the Final Commission Decision Efficiency Upgrades
Description:	Magnolia Power Project (01-AFC-06C) CEC Staff Analysis of Petition to Amend the Final Commission Decision for Efficiency Upgrades
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Organization:	California Energy Commission
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DATE: October 1, 2025

TO: Interested Parties

FROM: Joseph Douglas, Compliance Project Manager

**SUBJECT: Magnolia Power Project (01-AFC-06C)
CEC Staff Analysis of Petition to Amend the Final Commission
Decision**

On December 31, 2024, the Southern California Public Power Authority (SCPPA) filed a Post-Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision ([TN 060806](#)) with the California Energy Commission (CEC) for the Magnolia Power Project (MPP), pursuant to California Code of Regulations, title 20, section 1769.

The MPP, a 323-megawatt (MW) combined-cycle, natural gas facility was certified by the CEC in March 2003 and began commercial operation in September 2005. The MPP electric power generating facility consists of a 1-on-1, combined cycle Power Island. The facility is located at the Burbank Department of Water and Power (BWP) complex at 164 West Magnolia Boulevard in the central portion of the city of Burbank, in Los Angeles County.

Description of Proposed Change

The project owner is proposing to install and operate targeted upgrades at the existing MPP facility. The upgrades would increase operational power output and provide energy efficiency improvements by deploying Advanced Gas Path (AGP) and Advancements to the Air Compressor (AC) packages to the existing system. The AGP system would increase the facility's power output up to 24 MWs¹ by updating and redesigning the gas turbine's three stages of system buckets, nozzles and shrouds to enhance power performance. The AC package system would also increase the power output of the facility up to 29.9 MWs¹. The new AC package would include retrofitting General Electric's (GE) high efficiency compressor technology (e.g., GE 7F.04-200) and the Gen-V turbine rotor to MPP's gas turbine system. The compressor is composed of 14 stages and would be configured to increase air flow rate while accommodating inlet conditioning and improved erosion tolerance.

Installation of the AGP and AC efficiency upgrades would result in an overall increase of approximately 54 MWs in power production, support improved resiliency, and provide

¹ This is based on full load operations at ambient temperatures of 77 degrees Fahrenheit. The facility output varies with operational profile and ambient conditions. See Table 1, Magnolia Power Plant Baseload below for more details.

state level resource adequacy. Power generated by the system would be made available for multiple uses during normal operating hours, including during peak and high peak periods.

As noted above, MPP began commercial operation in 2005 and at the time of initial startup could generate up to 323 MWs. As a power facility ages it experiences power degradation, which refers to a decrease in power output over time. Power degradation is a result of several mechanical and material degradation factors including but not limited to thermal and mechanical stress, corrosion and erosion, fouling and aging infrastructure.

Currently, MPP has a gross MW output ranging from 247 MWs to 216 MWs dependent on the ambient conditions. See Table 1, Magnolia Power Plant Baseload, below.

Table 1- Magnolia Power Plant Baseload

Current Configuration - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output MWs	247.4	236.3	227.9	216.6
Advanced Gas Path - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output Delta %	9.7%	9.2%	7.3%	1.3%
CC Gross Output MW Improvement	24.02	21.82	16.61	2.83
Air Compressor and Advanced Gas Path - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output Delta %	21.8%	24.8%	23.3%	19.5%
CC Gross Output MW Improvement	53.93	58.66	53.02	42.32
Source: (SCPPA 2025)				

The Petition to Amend (PTA or petition) proposes the following actions for a worst-case air quality impacts analysis:

1. Increase nameplate electrical production from the licensed MPP combustion turbine from 181 MW to 212 MW (gross), an increase of 31MW².
2. Increase worst-case combustion turbine fuel consumption from 1,787 million British thermal units per hour on a higher heating value (MMBtu/hr-HHV) basis to a heat input of 2,103 MMBtu/hour-HHV.

² This is lower than the expected increase in generation capacity at ambient temperatures of 77 degrees Fahrenheit or higher. The difference is because emissions and air quality impacts were conservatively analyzed at 22 degrees Fahrenheit, when the combined cycle output without the upgrades is a much higher number due to the increased ambient air density. Due to electric system capacity limitation of 323 MW, the generation facility cannot utilize 53.9 MW of generation capacity upgrade at 22 degrees Fahrenheit (TN 266245).

3. The increased fuel consumption would increase the steam turbine generator (STG) nameplate output from approximately 142 MW to 143 MW (gross).
4. Increase air emissions commensurate with the increased fuel consumption.

CEC Staff Review and Conclusions

California Code of Regulations, title 20, section 1769 requires a project owner to petition the CEC for approval of any change the project owner proposes to the project, design, operation, or performance requirements of a certified facility. Consistent with these regulations, the CEC staff (staff) has reviewed the petition, for potential environmental effects and consistency with applicable laws, ordinances, regulations and standards (LORS) and MPP's conditions of certification (COCs).

Based on staff's analysis, contained below, staff has concluded that the proposed changes to the MPP would not have a significant effect on the environment, or cause the project to fail to comply with any applicable LORS, with the adoption of modified COCs in the area of Air Quality, Public Health and Greenhouse Gases.

Staff concludes the proposed modifications of Air Quality COCs do not meet any of the criteria requiring the preparation of subsequent or supplement review pursuant to Public Resources Code section 21166. Staff also concludes none of the findings specified in California Code of Regulations, title 20, section 1748(b) are applicable to the proposed changes.

As explained in the Staff Analysis, consistent with California Code of Regulations, title 20, section 1769(a)(4), staff is bringing this petition to the Commission for approval. Staff intends to recommend approval of the petition at the November 12, 2025, Business Meeting of the CEC. If the CEC approves the petition, then CEC program staff will be recommending funding for the two upgrades from the Distributed Electricity Backup Assets program (GFO-23-401).

The CEC's [project webpage](https://www.energy.ca.gov/powerplant/combined-cycle/magnolia-power-project), [https://www.energy.ca.gov/powerplant/combined-cycle/magnolia-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 \(01-AFC-06C\)](#)" 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 (e.g. transmission lines, etc.) and 1,000 feet of the project site. It has also been emailed to the MPP subscription list. The list is an automated 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 November 12, 2025, 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. 01-AFC-06C
715 P Street
Sacramento, CA 95814-5512

Comments will also be accepted during the scheduled business meeting. 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 project webpage](#).

If you have questions about this notice, please contact Compliance Project Manager Joseph Douglas, Compliance Monitoring and Enforcement Unit, Safety and Reliability Branch, at (916) 956-9527 or via e-mail at Joseph.Douglas@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.

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MAGNOLIA POWER PROJECT (01-AFC-06C)

Petition to Amend Commission Decision

EXECUTIVE SUMMARY

Ashley Gutierrez

INTRODUCTION

On December 31, 2024, the Southern California Public Power Authority (SCPPA) filed a Post-Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision (Petition) ([TN 060806](#)) with the California Energy Commission (CEC) for the Magnolia Power Project (MPP), pursuant to California Code of Regulations, title 20, section 1769.

The MPP, a 323-megawatt (MW) combined-cycle, natural gas facility was certified by the CEC in March 2003 and began commercial operation in September 2005. The facility is located at the BWP Campus at 164 West Magnolia Boulevard in the central portion of the city of Burbank, in Los Angeles County.

DESCRIPTION OF PROPOSED CHANGE(S)

The project owner is proposing to install and operate targeted upgrades at the existing MPP site. The upgrades would increase power output and provide energy efficiency improvements by deploying AGP and AC packages to the existing system. These improvements would collectively result in an overall 54 MW increase in power production, support improved resiliency and provide state level resource adequacy. Power generated by the system would be made available for multiple uses during normal operating hours, including during peak and high peak periods.

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 (LORS) (Cal. Code Regs., tit. 20, § 1769).

NECESSITY FOR THE PROPOSED CHANGE(S)

The primary purpose for this amendment is to increase electrical production and fuel consumption from the installation of upgraded original equipment manufacturer (OEM) compressor and combustor components that were not available at the time of licensing.

The project owner is proposing to install and operate targeted upgrades at the existing MPP facility. The upgrades would increase operational power output and provide energy efficiency improvements by deploying AGP and AC packages to the existing system. The AGP system would increase the facility's power output up to 24 MWs by updating and redesigning the gas turbine's three stages of system buckets, nozzles and shrouds, to

enhance power performance. The AC package system would also increase the power output of the facility up to 29.9 MWs. The new AC package would include retrofitting General Electric's (GE) high efficiency compressor technology (e.g., GE 7F.04-200) and the Gen-V turbine rotor to MPP's gas turbine system. The compressor is composed of 14 stages and would be configured to increase flow rate while accommodating inlet conditioning and improved erosion tolerance.

Installation of the AGP and AC efficiency upgrades would result in an overall increase of approximately 54 MWs in power production, support improved resiliency, and provide state level resource adequacy. Power generated by the system would be made available for multiple uses during normal operating hours, including during peak and high peak periods.

As noted above, MPP began commercial operation in 2005 and at the time of initial startup could generate up to 323 MWs. As a power facility ages, it experiences power degradation, which refers to a decrease in power output that occurs over time. Power degradation is a result of several mechanical and material degradation factors including, but not limited to, thermal and mechanical stress, corrosion and erosion, fouling and aging infrastructure. Currently, MPP has a gross MW output ranging from 247 MWs to 216 MWs dependent on the ambient conditions, approximately 76 to 107 MWs less than its allowable power output. See **Executive Summary Table 1, Magnolia Power Plant Baseload**, below, for more details.

**Executive Summary Table 1
Magnolia Power Plant Baseload**

Current Configuration - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output MWs	247.4	236.3	227.9	216.6
Advanced Gas Path - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output Delta %	9.7%	9.2%	7.3%	1.3%
CC Gross Output MW Improvement	24.02	21.82	16.61	2.83
Air Compressor and Advanced Gas Path - Baseload				
Ambient Temp	77	90	100	113
CC Gross Output Delta %	21.8%	24.8%	23.3%	19.5%
CC Gross Output MW Improvement	53.93	58.66	53.02	42.32
Source: (SCPPA 2025)				

Additionally, the installation and operation of the proposed AGP and AC packages supports California's most recent Distributed Electricity Backup Assets Program Bulk Grid Asset Enhancements for Grid Reliability (GFO-23-401) solicitation. Certain costs for the upgrades described in the petition have been proposed for funding by the CEC under that solicitation.

CEC STAFF REVIEW AND CONCLUSION

Consistent with the California Code of Regulations, title 20, section 1769, staff has reviewed the petition for potential environmental effects and consistency with LORS. Based on staff's analysis, contained below, staff has concluded that the proposed changes to the MPP would not have a significant effect on the environment, or cause the project to fail to comply with any applicable LORS, with the adoption of new and modified COCs in the areas of Air Quality, Public Health and Greenhouse Gases. Consistent with California Code of Regulations, title 20, section 1769(a)(4), staff is bringing this petition to the Commission for approval.

Staff concludes that none of the findings specified in California Code of Regulations, title 20, section 1748(b) apply to the proposed change.

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.

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 MPP.

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 that the project must comply with.

For the technical area of Air Quality, staff has proposed modifications to existing COCs and proposed new COCs. With the modification and addition of COCs, the project would continue to comply with all applicable LORS. The proposed project change would not result in significant impacts to ambient air quality, public health, or greenhouse gas

emissions. Please see the **Air Quality, Public Health, and Greenhouse Gases** section of 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 COCs. The basis for each of staff's conclusions are provided below:

AIR QUALITY

The petition requests upgrades to increase operational power output and provide energy efficiency improvements by deploying AGP and Advancements to the AC packages to the existing system. These changes would result in an overall increase in nameplate power production up to 32 MW (a potential increase of 31 MWs from the combustion turbine and 1 MW from the steam turbine). See footnote 2 above for a more detailed explanation of why the MW increase analyzed for a worst-case air quality impacts analysis at 22 degrees Fahrenheit is different from the MW increase at 77 degrees Fahrenheit or higher.

Staff reviewed the PTA and the associated South Coast Air Quality Management District (SCAQMD or District) Preliminary (Title V) Permit to Operate. Staff proposes the revision of **AQ-2b, AQ-11, AQ-22, AQ-23, AQ-25, AQ-27**, the addition of **AQ-2c, AQ-9, AQ-11a, AQ-25a**, and the deletion of **AQ-2a**.

The modified project would continue to comply with all LORS related to air quality and greenhouse gas emissions. With the updated COCs, air quality 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 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. A detailed analysis can be found under the **Air Quality, Public Health, and Greenhouse Gases** section of this Staff Analysis.

BIOLOGICAL RESOURCES

The modifications proposed in this petition would not require ground disturbance and project activities would be entirely within the power plant's developed footprint on existing paved areas. No habitat or vegetation would be disturbed during construction.

The project owner has proposed to inspect the combustion turbine enclosure for the presence of bird nests prior to commencing work and, if any nests are observed, to coordinate with a qualified biologist to conduct a survey and establish appropriate exclusion zones to avoid impacts to nesting birds. However, to date, no nests have been detected, and the project owner states that there has never been a nest in the combustion turbine enclosure. This activity constitutes a voluntary implementation of best practices by the project owner, and no conditions of certification for this action would be required for the project.

Operation of the MPP after installation of the proposed modifications would result in an approximate one percent annual increase of nitrogen oxide (NOx) emissions. Nitrogen deposition, which can result from NOx emissions, has the potential to degrade native plant communities. Although a minor increase in oxides of nitrogen NOx emissions is expected, potential nitrogen deposition impacts would be mitigated with the use of SCAQMD's RECLAIM Trading Credits, as required in COC **AQ-27**. Therefore, this impact would be less than significant.

The proposed project changes would not affect biological resources. There are no existing biological resources COCs for the project and no new COCs are required. The project would remain in compliance with all applicable LORS related to biological resources.

CULTURAL RESOURCES

Activities associated with this petition to amend would not be expected to affect cultural resources as no excavation would be needed to install the equipment. Equipment laydown and parking would use existing paved areas.

Additionally, to minimize any potential construction impacts to a less-than-significant level, the relevant COCs, particularly **CUL-1**, **CUL-2**, and **CUL-5** would be implemented for all construction activities, as well as **CUL-3** and **CUL-7** if ground disturbance in native soils become necessary.

EFFICIENCY

The installation of the AGP and AC upgrades would improve the facility's performance by increasing the current derated output and slightly increase its thermal efficiency. No LORS apply to power plant efficiency. There would be no adverse impact on power plant efficiency.

FACILITY DESIGN

The modifications proposed in this petition would involve construction that would require CEC's delegate chief building official (DCBO) oversight. For example, turbine pier anchor steel bracket would be installed to accommodate the base frame of the advance compressor. The steel bracket would be affixed to the turbine base via welding. Construction must be in accordance with the California Building Code. Implementations of the existing Facility Design COCs adopted in the CEC Decision and construction compliance oversight by the CEC's DCBO would ensure this compliance.

GEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Activities associated with the proposed project modification would not involve any ground disturbance to install the equipment. Equipment laydown and parking would use existing paved areas. Therefore, the proposed project modification would not have an impact on geological and paleontological resources, nor would it require any changes to

the existing COCs. The modification would conform to applicable LORS related to geological and paleontological resources.

HAZARDOUS MATERIALS MANAGEMENT

The proposed turbine upgrade would not involve extremely hazardous materials. Hazardous materials such as gasoline, solvents, lubricants, paints, and welding gases would be used in minimal quantities, posing no significant risk to workers or the offsite public. 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. Therefore, the proposed turbine upgrade would not significantly impact the project's hazardous materials management and conforms with applicable LORS.

LAND USE

The MPP site is designated for institutional and industrial uses and is developed with existing power generation facilities and related improvements, and the land use would remain as such after the installation of the proposed upgrade and replacement of old components. Activities would not involve any ground disturbance and temporary equipment laydown and parking would be on existing paved areas. The MPP would continue to meet all applicable COCs and 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 change would not result in the conversion of farmland or forest land. Therefore, no impact to land use would occur.

NOISE AND VIBRATION

Any noise generated during construction and installation activities would be temporary, intermittent, and consistent with the local noise ordinance (City of Burbank General Plan Noise Element and the City of Burbank Noise Ordinance) and would result in a less-than-significant impact with implementation of the existing **NOISE** COCs in the Decision.

The installation of the AGP and AC upgrades would not increase noise at nearby residences. The operational noise would not be affected by these upgrades. 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 installation and operational noise and would remain in compliance with all applicable LORS.

PUBLIC HEALTH

The health risk assessment for the proposed modifications shows that both residential and worker health impacts would be less than the significance thresholds for both cancer risk and acute/chronic hazard impacts. Therefore, public health impacts from the proposed modifications would be less than significant and the modified project would remain in compliance with all applicable LORS related to public health. A detailed analysis can be found under the **Air Quality, Public Health, and Greenhouse Gases** section of this Staff Analysis.

RELIABILITY

The modifications proposed in this petition would not adversely affect the power plant's overall reliability. The additional MW output would enhance grid reliability by serving the transmission grid the project is connected to.

SOCIOECONOMICS

The MPP site does not contain existing housing units and is designated for institutional and industrial uses. There would be up to 50 workers onsite each day during the 95-day installation duration. The modification would not require any changes in the operations workforce. There is no socioeconomics LORS or COCs applicable to the change, and there would be no workforce-related impacts on population, housing, and public services.

SOIL AND WATER

The proposed modification would not result in any ground disturbance, nor would water supply be altered. Therefore, there would be no impact to soil and water resources. The modification would conform to applicable LORS related to soil and water resources and no changes to the existing COCs would be required.

TRAFFIC AND TRANSPORTATION

All construction activities are anticipated to occur on-site and outside of the public right-of-way. Access would be via existing site driveways along Magnolia Boulevard and North Lake Street. Construction worker parking and equipment laydown/parking would occur on paved areas within the project site. There would be up to 50 workers travelling to the site each day for the 95-day installation duration. For the first seven days of the project, a total of 30 haul trucks are expected to arrive on site. This results in approximately nine one-way haul truck trips per day. For the remaining 88 days of project duration, 10 trucks are expected to arrive per week. This results in approximately three one-way haul truck trips per day. The project owner would implement the previously approved COC **TRANS-4** traffic control plan and implementation program. The modifications would not create any habitable space that would generate new vehicular trips during operations. Therefore, no long-term impacts to local or regional roadways, public transit systems, and bicycle or pedestrian facilities

would occur. The proposed change would not increase vehicle miles traveled for facility operations and would conform with applicable LORS and COCs. Therefore, traffic and transportation impacts would be temporary and less than significant.

TRANSMISSION LINE SAFETY AND NUISANCE

Additional output that occurs due to modification does not change the EMF values significantly, since the maximum facility power output would be unchanged, therefore the proposed modification would not impact Transmission Line Safety and Nuisance (TLSN) section. Therefore, with ongoing compliance with the existing LORS and COCs, the impacts of the proposed modifications on TLSN are expected to be less than significant.

TRANSMISSION SYSTEM ENGINEERING

The proposed efficiency improvement from installation of the advanced gas path and compressor upgrade project would result in an increase in power output, which will vary, ranging from 32 MWs to up to 54 MWs, depending on the outside ambient temperatures, as described in the Executive Summary Table 1. With the existing GE Mark VI and Emerson Delta V controls and limitations administered by existing transmission system design constraints, the efficiency improvements would allow MPP to generate power output to the transmission grid up to 320 MW, which would not exceed the approved 323 MW at the point of interconnection.

The proposed efficiency improvements would not cause additional downstream transmission impacts other than those identified in the approved MPP. The project would comply with applicable LORS and would not require a change to the existing COCs.

VISUAL RESOURCES

Installation and operation of the proposed upgrade and replacement of old components would not result in any physical changes of MPP's appearance from public views of the site. Activities would not involve any ground disturbance and temporary equipment laydown and parking would be on existing paved areas. Temporary construction lighting systems would be used to ensure worker safety during night-time construction. These lighting systems would comply with existing COC **VIS-1** to ensure offsite nighttime lighting impacts would not result in significant temporary visual impacts. The MPP would continue to meet all applicable COCs and LORS. Impacts to visual resources would be less than significant.

WASTE MANAGEMENT

The proposed modification would not impact the level of solid waste production from MPP. Therefore, with compliance with the existing LORS and COCs the impacts of the proposed modifications to waste generation and waste management are expected to be less than significant.

WORKER SAFETY AND FIRE PROTECTION

During the installation of the AGP and AC turbine upgrades, continued compliance with COC **WORKER SAFETY-1** would ensure the MPP's adherence to applicable LORS. With implementation of the COC, the proposed turbine upgrade would have a less than significant impact to Worker Safety and Fire Protection. The proposed efficiency upgrades would not significantly impact worker safety, nor would it impact offsite public; therefore, worker safety and fire protection impacts would be less than significant.

ENVIRONMENTAL JUSTICE

CALENVIROSCREEN

Staff reviewed CalEnviroScreen 4.0 data to determine whether the United States census tract where the Magnolia Power Project is located (06037310800) 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 63.3 and, thus, is not identified as a disadvantaged community³.

ENVIRONMENTAL JUSTICE

Environmental Justice Figure 1 shows 2020 census blocks in the six-mile radius of the MPP 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.

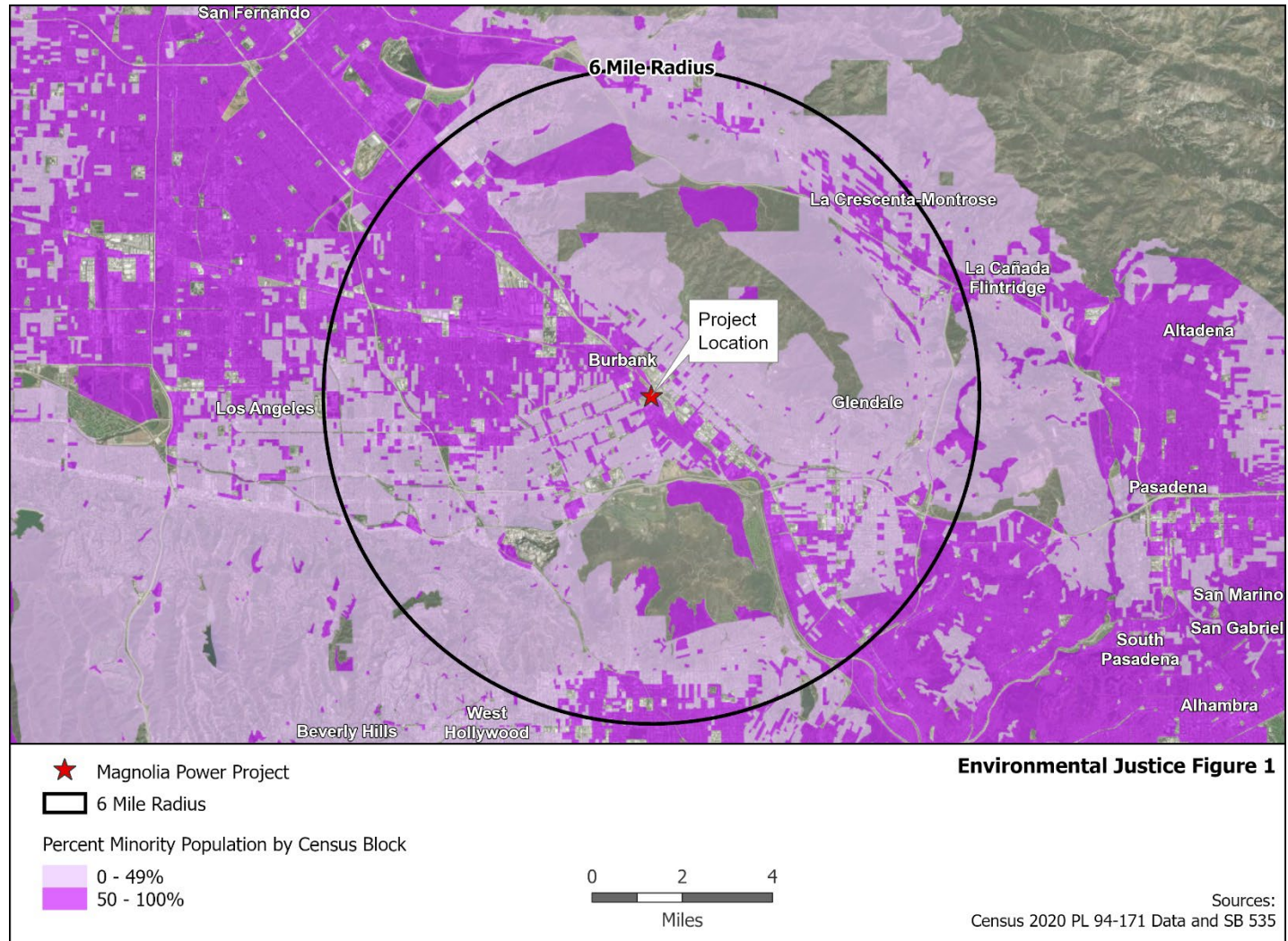
³ The four categories of geographic areas identified by CalEPA as disadvantaged are: 1) Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0, 2) Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 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/>

Based on California Department of Education data in the **Environmental Justice Table 1**, staff concluded that the percentage of those living in the Los Angeles Unified School District (in a six-mile radius of the project site) and enrolled in the free or reduced-price meal program is greater 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 Magnolia Power Project site.

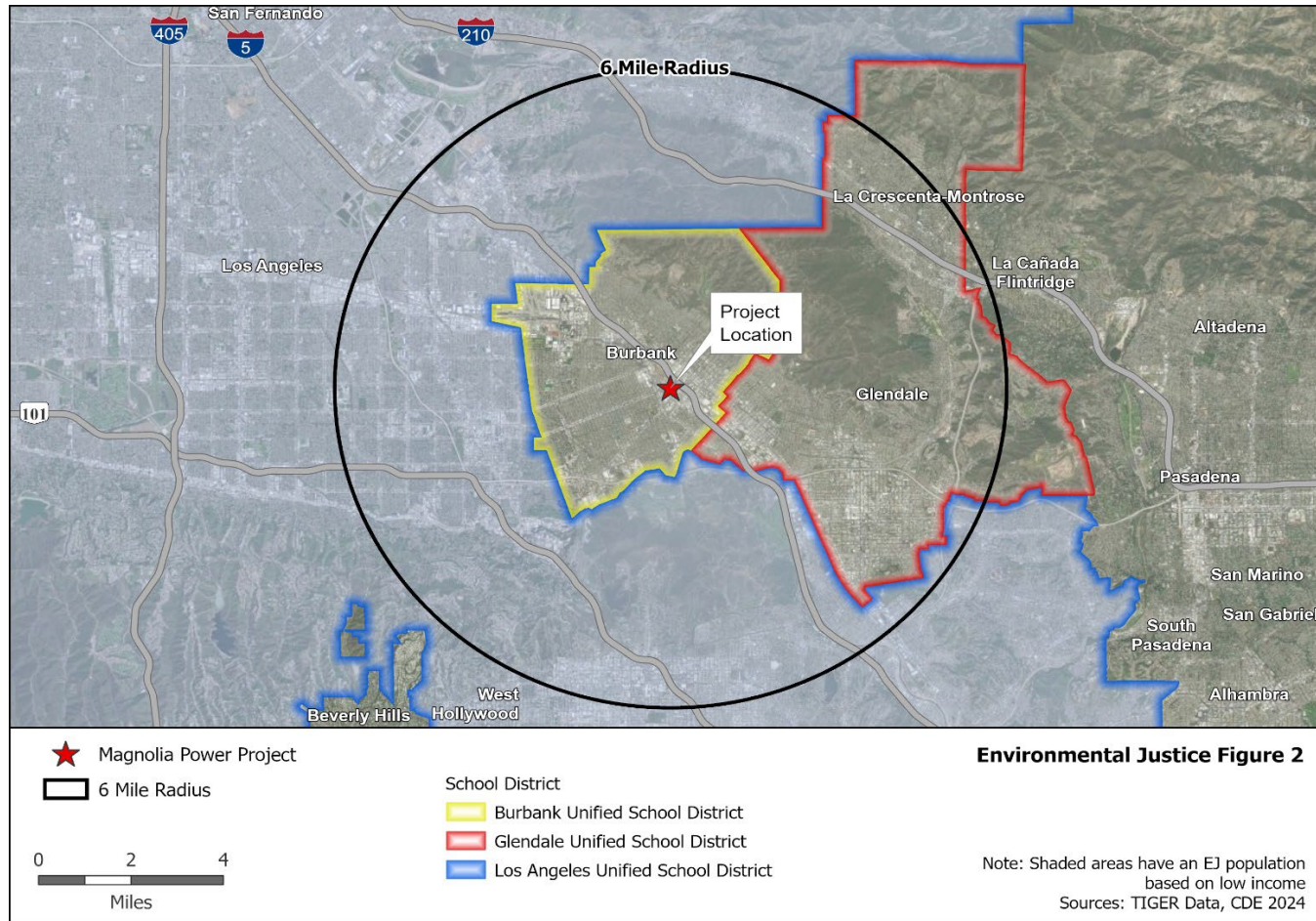
Environmental Justice – Table 1
Low Income Data within the Project Area

SCHOOL DISTRICTS IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced Price Meals	
Burbank Unified	14,240	4,544	31.9%
Glendale Unified	25,049	12,265	49.0%
Los Angeles Unified	539,902	427,850	80.7%
REFERENCE GEOGRAPHY			
Los Angeles County	1,298,060	898,230	69.2%
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/ .			

**Figure 1 Environmental Justice
Minority Population**



**Figure 2 Environmental Justice
Low Income Population**



Environmental Justice Conclusions

For this petition, the following technical areas 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. 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.**

In the Air Quality analysis, staff proposes modifications to existing COCs to mitigate potentially significant impacts on the environment. Staff has determined that by adopting the modifications to the existing COCs and the application of new COCs, the proposed project change 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.

CEC STAFF RECOMMENDATIONS AND CONCLUSIONS

Staff has reviewed the petition, and all the information provided to staff related to the petition pursuant to California Code of Regulations, title 20, section 1769 for potential environmental effects and consistency with applicable LORS. Consistent with these regulations, the CEC staff has reviewed the petition for potential environmental effects, consistency with applicable LORS, and MPP's COCs.

Staff concludes that none of the findings specified in California Code of Regulations, title 20, section 1748(b) are applicable to the proposed change. Staff also concludes the proposed modifications of Air Quality COCs do not meet any of the criteria requiring the preparation of subsequent or supplement review pursuant to Public Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163.

Consistent with California Code of Regulations, title 20, section 1769(a)(4), staff is bringing this petition to the Commission for approval.

Staff has recommended new and modified COCs for consistency with the new draft Authority to Construct permit issued by South Coast Air Quality Management District on July 22, 2025, which reflects the same proposed changes to the MPP. Staff concludes with regard to the proposed changes to the MPP: (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 COCs as adopted in the Decision or previous amendments to that decision, except for those related to Air Quality.

For the modifications to the Air Quality COCs 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 upgraded MPP would increase a daily, quarterly, annual, or other emission limit, but with the proposed modification of existing COCs **AQ-2b, AQ-11, AQ-22, AQ-23, AQ-25, AQ-27**, the addition of new COCs **AQ-2c, AQ-9, AQ-11a, AQ-25a**, and the deletion of the existing COC **AQ-2a** to conform with the new Authority to Construct permit issued by the District, the effect on the environment would be less than significant.

Magnolia Power Plant (01-AFC-06C)
Petition to Amend – Installation of the Advanced Gas Path and
Compressor Upgrade Project
Air Quality, Public Health, and Greenhouse Gases
Tao Jiang, Gerry Bemis and Ivan O'Brien

INTRODUCTION AND SUMMARY

On December 23, 2024, the Southern California Public Power Authority (SCPPA), filed a post-certification petition to amend (PTA) request with the California Energy Commission (CEC) for the Magnolia Power Plant (MPP). The PTA (SCPPA 2024) requests upgrades to increase operational power output and provide energy efficiency improvements by deploying Advanced Gas Path (AGP) and Advancements to the Compressor (AC) packages to the existing system. These improvements would increase power production, support improved energy resiliency and provide state level resource adequacy.

The MPP was certified by the CEC in March 2003 (CEC 2003). The facility is located at 164 West Magnolia Boulevard in the City of Burbank, California and is operated by the City of Burbank's Department of Water & Power (BWP). The facility includes one General Electric Model PG7241FA natural gas combustion turbine generator (CTG), an associated heat recovery steam generator (HRSG), and one steam turbine generator (STG).

Since the project was approved in 2003, the CEC has approved three air quality-related amendments:

- (1) modification to startup and shutdown operations including an increase in startup duration, number of startups and shutdowns, and duct burner operation (CEC 2017),
- (2) modification of the combustor system and installation of new fuel gas system piping (CEC 2020), and
- (3) an upgrade of the existing combustion system to allow improved combustor turndown and increased operating flexibility to integrate better with intermittent renewable energy resources (CEC 2021).

Staff reviewed the petition and the associated South Coast Air Quality Management District (SCAQMD or District) documents titled "Statement of Basis Analysis" (SCAQMD 2025c) and "Preliminary (Title V) Permit to Operate" (SCAQMD 2025a). CEC staff propose to incorporate the following proposed revisions from SCAQMD's draft permit into CEC's Conditions of Certification (COCs) as follows:

- Increase allowable annual hours of operation in COC **AQ-2b**,
- Add a new COC **AQ-2c** to limit annual fuel use,
- Add a new COC **AQ-9** to be consistent with the new source testing requirements as specified by SCAQMD,
- Increase monthly carbon monoxide (CO) and volatile organic carbon (VOC) emissions limits while decreasing monthly emissions limits of particulate matter less than 10 microns (PM10) and oxides of sulfur (SOx) in **AQ-11**,
- Add a new COC **AQ-11a** to limit PM10 emission factors,
- Increase oxides of nitrogen (NOx) emissions limits during startups and shutdowns and revise recommissioning hours, fuel use, and NOx emissions limits in COC **AQ-22**,
- Increase allowable CO emissions limits during startups and shutdowns and revise recommissioning hours, fuel use, and CO emissions limits in COC **AQ-23**,
- Modify COC **AQ-25** to remove recommissioning hours and fuel use limits and to exempt VOC emissions limits during startup and shutdown periods,
- Add a new COC **AQ-25a** to require SCPPA to submit Emission Reduction Credits (ERCs) for the increased VOC emissions;
- Increase required RECLAIM Trading Credits (RTCs) for the combustion turbine and decrease required RTCs for the duct burner in COC **AQ-27**, and
- Delete COC **AQ-2a** because it is no longer needed since the previous recommissioning period has been completed.

The modified project would continue to 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

CEC staff reviewed the PTA and the SCAQMD's Statement of Basis Analysis (SCAQMD 2025c), draft Title V permit (SCAQMD 2025a) and Air Quality Modeling Memo (SCAQMD 2025b) documents and evaluated these documents to ensure consistency with all federal, state, and District LORS. **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 and Compliance
Federal	U.S. Environmental Protection Agency
40 CFR 60, Subpart KKKK	This subpart applies to all stationary combustion turbines that were constructed, modified, or reconstructed after February 18, 2005 and with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour. The modified turbine would be rated at 2,103 million British thermal units per hour (MMBtu/hr) and would continue to be subject to a more stringent NO _x Best Available Control Technology (BACT) limit of 2.0 ppm @ 15% O ₂ . The turbine utilizes a NO _x CEMS as required per SCAQMD Rule 2012. Continued compliance is expected. Demonstration of compliance with the SO ₂ limit is required by monitoring the fuel sulfur in the combustion fuel. The facility will use pipeline quality natural gas that has less than 1 grain per 100 standard cubic feet of natural gas. Thus, fuel sulfur monitoring is not required. Continued compliance is expected.
40 CFR 60, Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units. Establishes emission standards for units installed after January 8, 2014. The proposed modifications would not qualify the upgraded turbines to be subject to subpart requirements, as the proposed modifications do not meet the definition of reconstruction.
40 CFR 63, Subpart YYYY	This subpart establishes emission and operation limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions. HAP emissions from this facility are below significance thresholds and this subpart does not apply to this facility.
40 CFR 64	This regulation applies to emission units at major stationary sources required to obtain a Title V permit and use control equipment to achieve specified emission limits and have emissions that are at least 100% of the major source thresholds on a pre-control basis. This facility has a continuous emissions monitoring (CEM) system and complies with the Compliance Assurance Monitoring (CAM) requirements of this regulation.
40 CFR 70	State Operating Permits Program—Part 70 establishes the Title V permitting program. MPP currently operates under a Title V permit. MPP submitted an application for Title V permit modification as part of SCAQMD requirements. Continued compliance is expected.
State	State California Air Resources Board and Energy Commission
California Health & Safety Code (H&SC) §41700 (Nuisance Regulation)	Prohibits discharge of such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance. Conditions required in the SCAQMD's Authority to Construct permit and the Energy Commission staff's Conditions of Certification ensure the continued compliance as expected.
H&SC §40910-40930 (District Plans to Attain State Ambient Air Quality Standards)	State Ambient Air Quality Standards should be achieved and maintained. The permitting of the source needs to be consistent with the approved clean air plan. The SCAQMD New Source Review (NSR) program needs to be consistent with regional air quality management plans. As discussed in more detail below, air quality modeling analysis shows that all impacts of MPP after modification would be less than the limiting ambient air quality standards. Therefore, continued compliance is expected.

Applicable LORS	Description and Compliance
Title 17 California Code of Regulations (CCR), Subchapter 10 (Climate Change)	Established requirements for mandatory greenhouse gas reporting, verification and other requirements pursuant to cap and trade regulations. The facility with proposed modifications would continue to be subject to federal and state mandatory GHG reporting and state cap-and-trade requirements. Continued compliance is expected.
Title 20 CCR, §2900-2913 (Provisions Applicable to Power Plants 10 MW and Larger)	Establishes the greenhouse gases emission performance standard (EPS), applicable to 10 MW and larger power plants. MPP is a deemed-compliant power plant. The proposed upgrades would improve the efficiency of the project. Therefore, continued compliance is expected.
Local	South Coast Air Quality Management District
Regulation II Permits: -Rule 212	Standards for Approving Permits and Issuing Public Notice—Outlines specific criteria for approving permits and issuing public notice. Outlines requirements for RECLAIM facilities. The proposed emissions increases trigger Rule 212 public noticing requirements for the on-site emission increases would exceed the daily maximum limit specified in Rule 212(g) for NOx, although MPP is not located within 1,000 feet of a school. SCAQMD published a public notice on July 30, 2025, with the 30-day comment period ending on August 29, 2025.
Regulation IV Prohibitions: -Rule 401	Visible Emissions—Establishes limits on visible emissions. SCAQMD reported there is no indication of visible emission problems in their compliance database. Staff does not expect visible emissions during the recommissioning period or future on-going operation of MPP.
-Rule 402	This rule prohibits discharge of air contaminants or materials which may cause nuisance to the public. No public nuisance is expected with the proper operation of this equipment and compliance is expected.
-Rule 407	This rule limits the CO emissions to 2000 ppmvd and SO ₂ emissions to 500 ppmvd averaged over 15 minutes. The turbine is subject to a more stringent CO BACT limit of 2 ppm. After installation of the turbine upgrades, a performance test will be required to verify compliance with the CO limit. The SO ₂ limit is not required to be tested due to the low sulfur content of the fuel.
-Rule 409	This rule establishes restrictions on particulate matter emissions from the turbines to 0.1 grain per cubic foot at 12 percent O ₂ . Source testing data from this project indicates compliance below the limit and continued compliance is expected.
-Rule 429.2	This rule limits startup to 6 hours and shutdown to 2 hours. The Condition of Certification AQ-22 requires the project to meet more stringent limits of 6 hours for startup and 30 minutes for shutdown. Continued compliance is expected.
-Rule 431.1	This rule limits the sulfur concentration to 16 ppmv (calculated as hydrogen sulfide) in natural gas. Continued compliance is expected because commercial grade natural gas has an average sulfur content of 4 ppm.
-Rule 475	This rule requires this facility to emit no more than 11 pounds/hour of particulate matter and no more than 0.01 grains of particulate matter per standard cubic foot of emissions. Continued compliance is expected and demonstrated through source testing.
-Rule 1135	This rule limits allowable NOx emissions from power plants greater than 50 MW in electric capacity. This rule requires this facility to measure emissions on a 1-hour basis rather than the currently allowed 3-hour basis. The facility is also required to use a continuous emissions

Applicable LORS	Description and Compliance
	monitoring system (CEMS), which is already in use at this facility and to do source testing, which is also already required. Continued compliance is expected through CEMS reports and source testing.
Regulation XIII New Source Review	New Source Review for Criteria Pollutants—This regulation applies to new or modified sources of emissions. Regulation XIII requirements are applicable to pollutants not covered under RECLAIM requirements. There would be increases in monthly CO and VOC emissions and decreases in monthly PM10 and SOx emissions. This regulation requires BACT, air quality impact analysis and offsets.
-Rule 1303(a)(1)	This rule requires BACT. Continued compliance is expected through CEMS reports and source testing.
-Rule 1303(b)(1)	This rule requires modelling of emissions to ensure the facility does not cause violation of an ambient air quality standard (AAQS) or make an area already exceeding an AAQS “significantly worse”. Air Quality Table 8 below shows the air quality impacts of the project with proposed modifications would be less than significant.
-Rule 1303(b)(2)	This rule requires emissions increases to be offset. The facility will be required to offset 24 lbs/day of VOC to mitigate facility VOC emissions increases. CEC staff proposes to add a new COC AQ-25a to require SCPPA to submit Emission Reduction Credits (ERCs) for VOC emissions.
Regulation XIII New Source Review: -Rule 1325	Federal PM2.5 New Source Review Program—Outlines requirements for particulate matter less than 2.5 microns (PM2.5) for any new major polluting facility or major modification to a major polluting facility located in areas designated as non-attainment for PM2.5. MPP’s potential to emit (PTE) is below 70 tons per year and there is no proposed increase in annual PM2.5 emissions. Therefore, SCAQMD does not consider MPP a major facility for PM2.5 under Rule 1325.
Regulation XIV Toxics and Other Non-Criteria Pollutants: -Rule 1401	The SCPPA modeled health risk impacts and results were lower than rule thresholds. Ongoing compliance is expected.
-Rule 1401.1	This rule applies only to relocated facilities and does not affect this amendment request.
Regulation XVII Prevention of Significant Deterioration (PSD) -Rule 1703	Prevention of Significant Deterioration—Establishes requirements for new major sources or modifications of existing sources in areas that meet (attainment) or are unclassifiable regarding National Ambient Air Quality Standards (NAAQS). The SCAB is in attainment for nitrogen dioxide (NO ₂), sulfur dioxide (SO ₂), CO and PM10 NAAQS. SCAQMD has partial delegation of PSD authority from the U.S. EPA depending on the calculation methodology and plant wide applicability limits. SCAQMD does not consider MPP a major source and the proposed changes do not constitute a major amendment in and of itself. Therefore, PSD requirements do not apply to the proposed changes.
Regulation XVII Prevention of Significant Deterioration (PSD) for Greenhouse Gases (GHGs) -Rule 1714	Prevention of Significant Deterioration (PSD) for Greenhouse Gases (GHGs)—GHGs are regulated pollutants under the PSD major source permitting program. A GHG analysis under PSD is only required when a source triggers PSD review for criteria pollutants. The amendment request does not trigger PSD for another regulated NSR pollutant as evaluated in Rule 1703, Rule 1714 does not apply.
Regulation XX	New Source Review for RECLAIM—Establishes requirements for new or modified facilities subject to the RECLAIM program. Air quality modeling was conducted by the SCPPA to ensure that any emissions increases

Applicable LORS	Description and Compliance
Regional Clean Air Incentives Market (RECLAIM) -Rule 2005	would not cause violation of the NO ₂ AAQS. The facility will be required to use RECLAIM trading credits (RTCs). CEC staff proposes updates to COC AQ-27 to reflect the changes in the RTC requirements.
-Rule 2012	The turbine is a major NO _x source under RECLAIM. As a major NO _x source, the turbine is required to install and maintain a CEMS, which includes both NO _x and O ₂ analyzers, a data handling system, a recording system, and a fuel meter. NO _x emissions are required to be reported by electronic transmission daily, and the facility must submit monthly and annual NO _x reports. The turbine is equipped with a CEMS and has been reporting their emissions as required under this rule. Continued compliance is expected.
Regulation XXX Title V Permits -Rule 3000	Establishes application procedures for facilities subject to Title V requirements. MPP is a Title V facility and SCAQMD has determined that the proposed revision for the modified turbine is a significant revision of the facility's Title V permit. Hourly NO _x emissions will increase from this modification. Therefore, the proposed revision for the modified turbine is considered a significant revision of the facility's Title V permit.
-Rule 3003	This rule requires public noticing. Pursuant to Rule 3003(j), a proposed permit incorporating proposed permit revision was submitted to EPA on July 22, 2025, with a request to complete the review by August 22, 2025. Pursuant to Rule 3003(m), the public notice was published on July 30, 2025, with the 30-day comment period ending on August 29, 2025.
-Rule 3006	This rule specifies that any person may request a proposed permit hearing on this application by filing with the SCAQMD's Executive Officer.

ANALYSIS

Air Quality

Construction

Construction is expected to take 95 days beginning in the first quarter of 2027. Construction activities do not include any ground disturbance; all construction activities are expected to occur within the project footprint. The anticipated heavy equipment used during the proposed project includes cranes, forklifts, air compressors and other general industrial equipment. When evaluating worst-case impacts, it was assumed that all equipment would operate an average of 24 hours per day over the 95-day construction period.

The California Emission Estimator Model (CalEEMod) was used to calculate emissions estimated to occur during construction. A total of 100 one-way trips per day for worker commutes were included in CalEEMod based on the assumption that there would be up to 50 workers onsite each day. For the first seven days of the project, a total of 30 haul trucks are expected to arrive on site, which results in approximately 9 one-way truck trips per day. For the remaining 88 days of project duration, 10 trucks are expected to arrive per week. This results in approximately 3 one-way truck trips per day. The

project is not expected to include any vendor deliveries or onsite truck trips. CalEEMod default one-way trip lengths of 18.5 miles for worker commutes and 20 miles for haul truck trips were assumed representative for this project in the absence of project-specific information. **Air Quality Table 2** shows a comparison of the amended project construction emissions, the original construction emissions, and the SCAQMD thresholds of significance.

Air Quality Table 2
Project Construction Emissions

Pollutant	Amended Project Construction Emissions	Original Construction Emissions	Change in Emission	SCAQMD Thresholds of Significance	Thresholds Exceedance
VOC	4.72 lbs/day	11.23 lbs/day	-6.51lbs/day	75 lbs/day	No
CO	39.0 lbs/day	61.81 lbs/day	-22.81 lbs/day	550 lbs/day	No
NOx	31.0 lbs/day	96.77 lbs/day	-65.77 lbs/day	100 lbs/day	No
SO₂	0.06 lbs/day	8.16 lbs/day	-8.1 lbs/day	150 lbs/day	No
PM₁₀	3.10 lbs/day	5.92 lbs/day	-2.82 lbs/day	150 lbs/day	No
PM_{2.5}	1.85 lbs/day	--	--	55 lbs/day	No
CO_{2e}	313 metric tons/year	--	--	10,000 metric tons/year	No

Sources:

Amended Project Construction Emissions are from SCPPA 2024, Table 3.1-1. Original Construction Emissions are from the 2002 Final Staff Assessment (FSA [CEC 2002]) Air Quality Table 11 and values are computed assuming construction occurs all 365 days per year.

As shown in **Air Quality Table 2** above, VOC, CO, NO_x, SO₂, PM₁₀ emissions generated by the amended project construction are expected to be less than those that were estimated for the original project construction. PM_{2.5} and CO_{2e} emissions were not estimated in the original project certification, so these are not compared here. In addition, estimated VOC, CO, NO_x, SO₂, PM₁₀, PM_{2.5} and CO_{2e} emissions are way below the applicable SCAQMD thresholds of significance. As a result, the proposed construction at the site is not expected to have a significant air quality impact with the implementation of existing Air Quality Conditions of Certification **AQ-C2** to **AQ-C4** and additional air quality mitigation measures are not required for construction.

Recommissioning

The upgraded CTG will require a period of recommissioning. This recommissioning period is expected to be conducted for 11 days. On the 11th day of recommissioning, the CTG will undergo performance testing for 12 hours. Of the total 252 recommissioning hours, the CTG will remain "on" for only 201 hours.

It is expected that emissions during recommissioning of the upgraded CTG would be less than emissions during the commissioning of the original CTG. The original commissioning would have been with new Selective Catalytic Reduction (SCR) systems that require tuning and break-in and likely operation without control devices in place. The new units will have control devices in place and the recommissioning time will be

shorter. Air quality impact modeling conducted by the SCPPA and reviewed by SCAQMD staff indicated that recommissioning activities would not cause any exceedances of air quality standards (SCAQMD 2025b). Staff summarized the worst-case modeled impacts in **Air Quality Table 8** below. The owner may request a short-term extension of the recommissioning period from the SCAQMD if needed. Staff proposes to revise the limits for the recommissioning hours, fuel use, NOx and CO emissions during recommissioning in COCs **AQ-22** and **AQ-23**, as analyzed and specified by SCAQMD.

Air Quality Table 3
Criteria Pollutant Emissions During Recommissioning Period

Pollutant	Recommissioning Maximum Daily Emissions (lbs/day) ^a	Recommissioning Emissions over 11 Days (lbs) ^a
NOx	857	3,146
CO	4,166	8,863
VOC	589	1,236
PM10	231	975
SOx	32	162

Source:

^a Proposed recommissioning emissions from SCAQMD 2025c, pages 9 and 10 of 58.

Operation

After completion of the recommissioning period, the gas turbine maximum hourly fuel firing rate will increase from 1,783 MMBtu/hr to 2,103 MMBtu/hr (HHV) and the annual operating hours of the gas turbine will increase from 8,322 hours per year (hrs/yr) to 8,508 hrs/yr in COC **AQ-2b**. Additionally, the SCPPA is proposing to operate with a capacity factor limit of 84.9%, which leads to the maximum annual fuel usage of 14,939 million standard cubic feet (MMscf). SCAQMD added a new condition, C1.5, to limit annual fuel usage. Staff proposes to add a new condition **AQ-2c** to be consistent with the SCAQMD condition C1.5.

During normal operations, NOx, CO, and VOC emission exhaust stack concentrations would continue to meet the limit of 2.0 ppmv averaged over 1 hour at 15 percent oxygen, dry, as specified in COCs **AQ-22**, **AQ-23**, and **AQ-25**. As shown in **Air Quality Table 4**, the increase in hourly heat input rate would result in an increase to the maximum hourly emissions for NOx, CO, VOC and ammonia. The change in PM10 emissions factors (as specified in revised **AQ-11** and new **AQ-11a**), based on source testing, will reduce the facility's PM emissions. In addition, the change in SOx emission factor (as specified in revised **AQ-11**), based on the SCAQMD default emission factor, will also reduce the facility's SOx emissions. SCAQMD staff conducted modeling to ensure these changes would not cause exceedances of ambient air quality standards (SCAQMD 2025b, pages 2 and 3). Staff summarized the worst-case modeled impacts in **Air Quality Table 8** below. However, besides the emission concentration limits in COCs **AQ-22**, **AQ-23**, and **AQ-25** and emission factors in **AQ-11** and **AQ-11a**, hourly

emissions (in pounds per hour) during normal operation are not limited in any COCs or SCAQMD permit conditions.

Air Quality Table 4 shows a comparison of the maximum normal operation hourly emissions for the gas turbine with duct firing before and after the proposed modifications, while **Air Quality Table 5** shows the change in maximum daily emissions during project operation (including startups and shutdowns) before and after the modifications.

Air Quality Table 4
Maximum Normal Operation Hourly Emissions
(pounds per hour)

Pollutant	Pre-Modification Emissions	Post-Modification Emissions	Change in Emission
NOx	17.48	19.8	+2.32
CO	10.64	12.05	+1.41
VOC	6.08	6.89	+0.81
PM10	16.22	13.73	-2.49
SOx	1.70	1.53	-0.17
NH₃	16.15	18.30	+2.15

Source: SCAQMD 2025c, page 10 of 58, SCPPA 2024, page 91 of 590.

Air Quality Table 5
Maximum Daily Normal Operation Emissions
(pounds per day)

Pollutant	Pre-Modification Emissions	Post-Modification Emissions	Change in Emissions
NOx	747.3	870.1	122.8
CO	791.8	926.2	134.4
VOC	145.2	167.6	22.4
PM10	336.1	289.7	-46.4
SOx	35.8	32.8	-3.0
NH₃	382.3	391.5	9.2

Source: SCAQMD 2025c, pages 10 and 11 of 58.

The SCPPA has proposed to increase maximum emissions during startups and shutdowns for NOx, CO, and VOC and the SCAQMD has approved these changes. They are shown below in **Air Quality Tables 6**. SCAQMD staff conducted modeling to ensure these changes would not cause exceedances of ambient air quality standards (SCAQMD 2025b, pages 2 and 3) and no exceedances were found. Staff summarized the worst-case modeled impacts in **Air Quality Table 8** below. **Air Quality Tables 6** show that maximum hourly and daily emissions of PM10 and SOx would decrease, consistent with **Air Quality Tables 4** and **5**. Staff proposes to update the startup and shutdown emission limits in COCs **AQ-11**, **AQ-22** and **AQ-23** to be consistent with the SCAQMD permit conditions A63.2, A195.5 and A195.6.

Air Quality Table 6
Startup and Shutdown Emission Limits (pounds per event)

Pollutant	Startup			Shutdown		
	Pre-Modification Emission Limits	Post-Modification Emission Limits	Change in Emission Limits	Pre-Modification Emission Limits	Post-Modification Emission Limits	Change in Emission Limits
NOx	440	517.78	77.78	25	29.42	4.42
CO	500	588.39	88.39	120	141.22	21.22
VOC	30	35.30	5.3	17	20.01	3.01
PM10	70.74	62.46	-8.28	5.90	5.20	-0.7
SOx	7.68	7.21	-0.47	0.64	0.60	-0.04

Source: SCAQMD 2025c, page 8-9 of 58. A startup requires up to 6 hours and a shutdown is 30 minutes or less.

The SCPPA has proposed to increase monthly normal operating CO and VOC emissions and to reduce monthly PM10 and SOx emissions as shown in Condition of Certification **AQ-11** and the SCAQMD has approved these changes (in condition A63.2). In addition, SCAQMD calculated that the 30-day average VOC emissions would increase 19.8 pounds/day. With an offset ratio of 1.2 to 1, SCPPA is required to provide 24 pounds per day of VOC ERCs at the time of permit to construct issuance. Staff proposes to add a new COC **AQ-25a** to require SCPPA to submit ERCs for VOC emissions.

Air Quality Table 7
Maximum Monthly Emissions (pounds per month)

Pollutant	Pre-Modification		Post-Modification		Change	
	Monthly Emissions	30-Day Average (lbs/day)	Monthly Emissions	30-Day Average (lbs/day)	Monthly Emissions	30-Day Average (lbs/day)
NOx	12,418	414	14,427.50	480.9	+2,009.5	+66.9
CO	9,243	308	10,764.62	358.8	+1,521.62	+50.8
VOC	3,744	125	4,343.16	144.8	+599.16	+19.8
PM10	9,552	318	8,292.64	276.4	-1259.36	-41.6
SOx	1,022	34	945.19	31.5	-76.81	-2.5

Source: SCAQMD 2025c, pages 12 and 13 of 58.

Air Quality Table 9 shows that annual emissions of the project would also increase with the proposed modifications, except for SOx and PM. **Air Quality Table 8** below shows that the annual emission increases would not cause exceedance of any ambient air quality standards. Annual NOx emission increases are required to be offset by RECLAIM Trading Credits (RTCs). SCAQMD calculated the RTC requirement for the gas turbine and the duct burner separately. The RTCs required for the gas turbine would increase to offset the increased annual emissions. However, because the total capacity factor would be limited to 84.9%, the RTCs required for the duct burner would be reduced compared to the current requirements. CEC staff proposes to amend Condition of Certification **AQ-27** to reflect the changes in the RTC requirements for the gas

turbine and the duct burner.

Air Quality Table 8 compares the worst-case impacts modeled for the project with the proposed modifications combined with the background against limiting ambient air quality standards. **Air Quality Table 8** shows that the project with the proposed modifications would not cause a violation of 1-hour or 8-hour CO, 1-hour or annual NO₂, or 1-hour and 24-hour SO₂ ambient air quality standards. All impacts of MPP after modification are less than the limiting ambient air quality standard. Therefore, the air quality impacts of the project with proposed modifications would be less than significant.

Air Quality Table 8
Ambient Air Quality Impacts Analysis Results (Worst-Case Impacts)

Pollutant	Averaging Period	Project Impact (µg/m ³)	Background (µg/m ³)	Total Impact (µg/m ³)	Limiting Standard (µg/m ³)	Percent of Standard
CO	State 1-hour ^a	363	2,300	2,663	23,000	11.5%
	Federal 1-hour ^a	363	2,300	2,663	40,000	6.6%
	State & Federal 8-hr ^b	199	1,840	2,039	10,000	20.4%
NO ₂	State 1-hour ^c	43.4	122.9	166.3	339	49.0%
	Federal 1-hour ^c	29.0	89.4	118.4	188	63.0%
	State Annual ^d	0.3	26.1	26.4	57	46.3%
	Federal Annual ^d	0.3	26.1	26.4	100	26.4%
SO ₂	State 1-hour ^e	0.4	20.2	20.6	655	20.0%
	Federal 1-hour ^e	0.3	5.5	5.8	196	3.0%
	State 24-hour ^f	0.15	5.50	5.65	105	5.4%

Sources (SCAQMD 2025b):

a Table 1, page 2, worst-case impacts modeled during recommissioning

b Table 2, page 2, worst-case impacts modeled during recommissioning

c Table 5, page 3, worst-case impacts modeled during recommissioning for state 1-hour NO₂ and during startups for federal 1-hour NO₂.

d Table 6, page 3

e Table 7, page 3

f Table 8, page 4

PSD Applicability Analysis

Pursuant to 40 CFR Section 52.21(a)(2)(ii), a Prevention of Significant Deterioration (PSD) review is required only when a proposed modification would result in a significant emission increase of an attainment (PSD) pollutant.

MPP is not defined as a major source, because its emissions are below 100 tons per year (tpy). Furthermore, this facility will continue to be a minor source as the post-

modification emissions would continue to be lower than the PSD major source threshold of 100 tpy. Therefore, PSD requirements do not apply.

Air Quality Table 9 shows MPP's annual potential to emit (PTE) increases and mitigation measures as required by SCAQMD.

Air Quality Table 9 ^a
Annual Potential to Emit (PTE) for MPP (tons per year)

Pollutant	Baseline Annual PTE Emissions	Projected Annual PTE Emissions	PTE Emissions Increase
NOx	68.4	69.2	0.8 ^b
SOx	5.5	4.5	-1.0
PM10	51.3	39.0	-12.3
CO	51.7	55.6	3.9
VOC	20.3	20.7	0.4 ^c
NH ₃	50.2	51.1	0.9

Sources:

^a SCAQMD 2025c, page 15 of 58, converted to tons per year.

^b NOx emissions offsets required in the form of RECLAIM Trading Credits; see SCAQMD 2025c, page 38 of 58.

^c VOC emissions offsets required at a rate of 24 lbs/day; see SCAQMD 2025c, page 25 of 58.

Public Health

SCAQMD staff evaluated potential for public health impacts as a result of the proposed modifications. According to Table 9 of SCAQMD 2025b, both residential and worker health impacts would be less than the significance thresholds for both cancer risk and acute/chronic hazard impacts. Therefore, the public health impacts of the proposed modifications would be less than significant.

Greenhouse Gas Emissions

SCAQMD staff have computed greenhouse gas (GHG) emissions for MPP after these upgrades are installed. Values are shown below in **Air Quality Table 10**. Emissions before modification were provided by the SCPPA and are based on 8,322 operating hours per year, while emissions after modification were computed assuming 8,508 operating hours per year and a capacity factor limit of 84.9%. Increased GHG emissions are due to both increased operating hours and increased fuel throughput. Emissions in **Air Quality Table 10** are based on permitted levels of annual fuel use and annual hours of operation, and represent potential to emit, not actual operations. Actual GHG emissions reported to the California Air Resources Board's Mandatory Reporting database for this facility were 0.617 million metric tons in 2023 (CARB 2025).

Air Quality Table 10
MPP Greenhouse Gas Emissions (million metric tons)

GHG	Before Modifications ^a	After Modifications ^b
CO ₂	0.819	0.832
CH ₄	--	--
N ₂ O	--	--
Total CO ₂ e	0.820	0.833

Sources:

^a SCPPA 2019, page 2-8. This reference did not include CH₄ or N₂O emissions explicitly but they are included in the total. Converted from tons to million metric tons.

^b SCAQMD 2025c, Appendix C, with CEC staff calculation based on annual heat input of 15,685,550 MMBtu associated with a capacity factor limit of 84.9%.

SCAQMD Rule 1714 addresses GHG emissions increases. SCAQMD staff determined that this rule would not affect the changes proposed by this amendment (SCAQMD, page 27 of 58). Specifically, Rule 1714 addresses GHG emissions while Rule 1703 addresses criteria pollutant emissions. The amendment request does not trigger PSD for another regulated NSR pollutant as evaluated in Rule 1703, Rule 1714 does not apply. And the MPP facility's GHG emissions increase of about 14,330 tons per year from the amendment would be less than the Rule 1714 threshold of 75,000 tons per year increase of CO₂e. The facility with proposed modifications would continue to be subject to federal and state mandatory GHG reporting and state cap-and-trade requirements. Therefore, GHG emission increases due to the proposed modifications would be less than significant.

CONCLUSIONS AND RECOMMENDATIONS

Staff recommends approval of the proposed upgrade of the MPP facility as described in the SCPPA's amendment request (SCPPA 2024) with accompanying changes to the air quality conditions of certification. All proposed changes would conform with the applicable LORS related to air quality and would not result in significant impacts to ambient air quality and public health, nor would it result in greenhouse gas emissions that would have a significant impact on the environment.

AMENDED CONDITIONS OF CERTIFICATION

The modifications to the Air Quality conditions of certification are included below. **Bold underline** text indicates new language. ~~Strikethrough~~ indicates deleted language. **Air Quality Table 11** below includes a summary of the proposed modifications and corresponding justifications.

Air Quality Table 11

CEC Condition	SCAQMD Permit Condition	Proposed Modification and Justification
AQ-2a	Not in the current SCAQMD permit	CEC staff proposes to delete this condition. It limited the allowable operating hours per 12 months during the recommissioning activities that occurred in 2020. This time has passed and this condition is no longer needed.
AQ-2b	C1.6	CEC staff proposes to update this condition to increase the allowable operating hours to 8,508 hours in any one year, consistent with SCAQMD's limit. This change allows the facility to operate at a capacity factor of up to 84.9%. Analysis conducted by the SCPA and SCAQMD staff indicate that this would not cause exceedance of any annual ambient air quality standard.
AQ-2c	C1.5	CEC staff proposes to add this condition to limit annual fuel use, consistent with COC AQ-2b and the SCAQMD analysis.
AQ-9	D29.4	The original COC AQ-9 was deleted and combined with COC AQ-8 in a previous amendment in 2020 (CEC 2020). CEC staff proposes to add a new COC AQ-9 to be consistent with the new source testing requirements as specified by SCAQMD.
AQ-11	A63.2	CEC staff proposes to increase monthly maximum allowable emissions for carbon monoxide and volatile organic compounds, consistent with SCAQMD's revised monthly limits. These increases are based upon emissions after the equipment upgrades. Staff also proposed to decrease monthly maximum allowable emissions of PM10 and SOx, consistent with SCAQMD's revised monthly limits for these two pollutants. The reduction in PM emissions is based upon results of source testing conducted at this facility, and the reduction in SOx emissions is based upon the SCAQMD default emission factor, which revealed that previous limits were based on an emissions rate that overstated facility emissions for these two pollutants.
AQ-11a	A99.1	CEC staff proposes to add this condition to limit PM10 emission factors as specified by SCAQMD analysis.

CEC Condition	SCAQMD Permit Condition	Proposed Modification and Justification
AQ-22	A195.5	CEC staff proposes to modify this COC to limit NOx emissions verification to a 1-hour period and modify allowable emissions after startup and preceding shutdown and during recommissioning, all as specified by SCAQMD.
AQ-23	A195.6	CEC staff proposes to modify this COC to set or revise limits of CO emissions during startup and preceding shutdown and during recommissioning, all as specified by SCAQMD.
AQ-25	A195.7	CEC staff proposes to modify this COC to remove recommissioning hours and fuel use limits since these are already specified in AQ-22 and AQ-23 . To be consistent with the SCAQMD permit condition, staff also proposes to modify this COC to exempt VOC emissions limits during startup and shutdown periods.
AQ-25a	Not in the current SCAQMD permit	CEC staff proposes to add this COC to document transfer of Emission Reduction Credits (ERCs) for VOC as required by SCAQMD Rule 1303(b)(2).
AQ-27	I298.3 & I129.4	CEC staff proposes to modify this COC to update RECLAIM trading credits (RTCs) for NOx emissions, consistent with the updated RTCs specified by SCAQMD. This will increase required RTCs for the combustion turbine and reduce required RTCs for the duct burner.

UPDATED EQUIPMENT AND CONDITIONS OF CERTIFICATION

ID No.	Equipment Descriptions
Internal Combustion: Power generation	
D4	Natural Gas Combined-Cycle, 1,787 2,103 MMBtu/hr Gas Turbine No. 1 General Electric Model PG7241FA, 181.1 211.72 MW with Dry Low NOx Combustors DLN2.6+, a Heat Recovery Steam Generator, and a 142 143 ⁴ MW Steam Generator. Connected to C9 and C10.

⁴ There was a typographical error in the application to the SCAQMD, which said the steam turbine capacity would keep at 142 MW. This steam turbine generator output increase from 142 MW to 143 MW would not impact emission calculations or modeling analysis. SCAQMD would correct the capacity in the final permit.

AQ-2a Deleted The project owner shall limit the operating time to no more than 7,914 hours in any 12 months.

The limit applies only to the 12-month period beginning from the start of the recommissioning operation in 2020. The hours counted towards the limit shall include normal operation with and without duct firing and start up and shutdown time but does not include operation during recommissioning.

[Rule 1303(b)(1)-Modeling; Rule 2005]

[Devices subject to this condition: D4]

Verification: The project owner shall submit data on the hourly operation to the CPM to demonstrate compliance with the 7,914 annual hour operation limit in the applicable Quarterly Operation Reports until no portion of the 12-month period includes recommissioning. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-2b The project owner shall limit the operating time to no more than 8,096 **8,508** hours in any **one year** 12-month period.

The limit applies only to the 12-month period beginning from the start of the recommissioning in 2021. The hours counted towards the limit shall include normal operation with and without duct firing and start up and shutdown time but does not include operation during recommissioning.

[Rule 1303(b)(1)-Modeling, **5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; Rule 2005, 12-4-2015; Rule 2005, 11-5-2021**]

[Devices subject to this condition: D4]

Verification: The project owner shall submit data on the hourly operation to the CPM to demonstrate compliance with the 8,096 annual hour operation limit in the applicable Quarterly Operation Reports until no portion of the 12-month period includes recommissioning. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-2c The project owner shall limit the fuel usage to no more than 14,939 MM cubic feet per year. For the purpose of this condition, the limit shall be based on the total combined fuel usage from equipment D4 (Gas Turbine 1) and D6 (Duct Burner).

[Rule 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; Rule 2005, 12-4-2015; Rule 2005, 11-5-2021]

[Devices subject to this condition: D4, D6]

Verification: The project owner shall submit the monthly fuel use data to the CPM in Annual Operation Reports. The project owner shall make the site and

records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-9 Deleted The operator shall conduct source test(s) for the pollutant(s) identified below.

<u>Pollutant to be Tested</u>	<u>Required Test Method(s)</u>	<u>Averaging Time</u>	<u>Test Location</u>
<u>VOC emissions</u>	<u>Approved District Method</u>	<u>1 hour</u>	<u>Outlet of the SCR</u>
<u>PM10 emissions</u>	<u>Approved District Method</u>	<u>District-approved averaging Time</u>	<u>Outlet of the SCR</u>
<u>NH3 emissions</u>	<u>District Method 207.1</u>	<u>1 hour</u>	<u>Outlet of the SCR</u>

The test shall be conducted within 180 days after the recommissioning, unless an extension is approved by the SCAQMD's Executive Officer.

The source test is to demonstrate compliance with the 2 ppmv VOC and 5 ppmv NH3 limits, and applicable PM10 emission limits.

The source test shall be conducted at maximum achievable equipment load, with and without duct burner firing.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH) and the flue gas flow rate. The combined gas turbine and steam turbine generating output in MW shall also be recorded if applicable.

The test shall be conducted in accordance with a SCAQMD approved source test protocol.

For gas turbines only the VOC test shall use the following method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to having less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the canisters temperature when extracting samples for analysis is not below 70 degrees F.

The use of this alternative VOC test method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results must be reported with two significant digits.

Source test results shall be submitted to the SCAQMD no later than 60 days after the source test was conducted.

[Rule 1303(a)(1)–BACT, 5-10-1996; Rule 1303(a)(1)–BACT, 12-6-2002; Rule 1303(b)(2)–Offset, 5-10-1996; Rule 1303(b)(2)–Offset, 12-6-2002]

[Device subject to this condition: D4, D6]

Verification: The project owner shall submit test results to the SCAQMD and CPM no later than 60 days following the source test date and notify the SCAQMD and CPM no later than 10 days prior to the source test date and time.

AQ-11 The project owner shall limit emissions from this equipment as follows:

Contaminant	Emissions Limit
CO	9,243 10,765 LBS IN ANY 1 MONTH
PM10	9,552 8,293 LBS IN ANY 1 MONTH
VOC	3,744 4,343 LBS IN ANY 1 MONTH
SOx	1,022 945 LBS IN ANY 1 MONTH

The above limit applies once the equipment commences commercial operation after the recommissioning is complete.

The project owner shall calculate the emission limit(s) by using monthly fuel use data and the following emission factors: PM10 with duct firing ~~= 7.98~~ **5.37** lbs/MMscf, PM10 without duct firing ~~= 6.93~~ **5.20** lbs/MMscf, VOC with duct firing ~~= 2.69~~ lbs/MMscf, VOC without duct firing ~~= 2.69~~ lbs/MMscf, VOC startups ~~= 30~~ **35** lbs/event, VOC shutdowns ~~= 17~~ **20** lbs/event, SOx ~~= 0.75~~ **0.60** lbs/mmscf.

The project owner shall calculate the emission limit(s) for CO, after the CO CEMS certification, based on readings from the **SCAQMD** certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated in accordance with the approved CEMS plan.

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D4 (Gas Turbine 1) and D6 (Duct Burner).

[Rule 1303(b)(2)-Offset, 5-10-1996; Rule 1303(b)(2)–Offset, 12-6-2002]

[Devices subject to this condition: D4, D6]

Verification: The project owner shall submit the monthly fuel use data and emissions calculations to the CPM in Quarterly Operation Reports.

The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-11a The 0.005 lb/MMBtu PM10 emission limit(s) shall only apply to gas turbine operation without the duct burner firing. The 0.006 lb/MMBtu emission limit shall only apply to gas turbine operation with the duct burner firing.

Verification: The project owner shall submit the monthly fuel use data and emissions calculations to the CPM in Quarterly Operation Reports. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-22 The project owner shall limit NOx emissions to 2.0 ppmv. The 2.0 ppmv NOx emission limit is averaged over 3 hours **1 hour** at 15 percent oxygen, dry.

The 2.0 PPM NOx emission limit shall not apply during startup, recommissioning, and shutdown periods. Startup time shall not exceed 6 hours per startup per day. NOx emissions during the 6 hours after commencement of a startup shall not exceed 440 **518** lbs. Shutdown time shall not exceed 30 minutes per shutdown per day. NOx emissions during the 30 minutes prior to the conclusion of a shutdown shall not exceed 25 **29** lbs. The project owner shall limit the number of startups to 5 per month.

The project owner shall keep records of the date, time and duration as well as minute-by-minute data (NOx, CO, and O2 concentration and fuel flow rate at a minimum) of each startup and shutdown.

Recommissioning is a one-time event that shall not exceed 159.6 **201** turbine operating hours and 214 **271** mmscf of fuel use. Once started, the recommissioning shall be completed within 60 days, **unless an extension is granted by SCAQMD's Executive Officer.**

The NOx emissions during recommissioning shall not exceed 198 lbs/hr and 4,155 **3,146** total lbs as determined through use of the certified CEMS. The project owner shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use and the NOx and CO emissions.

The project owner shall notify SCAQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation.

[Rule 2005; **12-4-2015; Rule 2005, 11-5-2021**]

[Devices subject to this condition: D4, D6]

Verification: The project owner shall submit to the CPM CEMS data and emissions calculations to demonstrate compliance for the NOx limits in Quarterly Operation Reports. The project owner shall submit to the CPM CEMS data and fuel use data to demonstrate compliance with NOx emission limits and fuel usage during the one-time recommissioning event in any applicable Quarterly Operation Report. The project owner shall submit to the CPM monthly start up and shutdown data to demonstrate

compliance with the monthly limit on the number of startups and startup and shutdown duration requirements in the Quarterly Operation Reports. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-23 ~~The project owner shall limit CO emissions to 2.0 ppmv. The 2.0 ppmv CO emission limit is averaged over 1 hour at 15 percent oxygen, dry.~~

The 2.0 PPM CO emission limit shall not apply during startup, recommissioning, and shutdown periods. Startup time shall not exceed 6 hours per startup per day. **CO emissions during the 6 hours after commencement of an startup shall not exceed 588 lbs.** Shutdown time shall not exceed 30 minutes per shutdown per day. CO emissions during the 30 minutes prior to the conclusion of a shutdown shall not exceed ~~120~~ **141** lbs. The project owner shall limit the number of startups to 5 per month.

The project owner shall keep records of the date, time and duration as well as minute-by-minute data (NO_x, CO, and O₂ concentration and fuel flow rate at a minimum) of each startup and shutdown.

Recommissioning is a one-time event that shall not exceed ~~159.6~~ **201** turbine operating hours and ~~214~~ **271** mmscf of fuel use. Once started, the recommissioning shall be completed within 60 days **unless an exemption is granted by SCAQMD's Executive Officer.**

The CO emissions during recommissioning shall not exceed ~~84 lbs/hr, 792 lbs in any one day, and 1,439~~ **8,863** lbs total as determined through use of the certified CEMS. The project owner shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use, and the NO_x and CO emissions.

The project owner shall notify SCAQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation.

[Rule 1303(a)(1)-BACT, **5-10-1996; Rule 1303(a)(1)-BACT, 12-6-2002**]

[Devices subject to this condition: D4, D6]

Verification: The project owner shall submit to the CPM CEMS data and emissions calculations to demonstrate compliance for the CO limits in Quarterly Operation Reports. The project owner shall submit to the CPM CEMS data and fuel use data to demonstrate compliance with CO emission limits and fuel usage during the one-time recommissioning event in any applicable Quarterly Operation Report. The project owner shall submit to the CPM monthly start up and shutdown data to demonstrate compliance with the monthly limit on the number of startups and startup and shutdown duration requirements in the Quarterly Operation Reports. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

AQ-25 ~~The project owner shall limit VOC emissions to 2.0 ppmv. The 2.0 ppmv VOC emission limit is averaged over 1 hour at 15 percent oxygen, dry.~~

~~The 2.0 VOC emission limit shall not apply during **startup**, recommissioning **and shutdown periods**. Recommissioning is a one-time event that shall not exceed 159.6 turbine operating hours and 214 mmsecf of fuel use. Once started, the recommissioning shall be completed within 60 days.~~

~~The project owner shall keep records of the date and time the turbine is operated during recommissioning, the duration of the operation, the fuel use, and the NOx and CO emissions. The project owner shall notify AQMD prior to the start of the recommissioning operation and at the conclusion of the recommissioning operation.~~

~~[Rule 1303(a)(1)-BACT, **5-10-1996; Rule 1303(a)(1)-BACT, 12-6-2002**]~~

~~[Devices subject to this condition: D4, D6]~~

Verification: The project owner shall submit to the CPM emissions calculations to demonstrate compliance with the VOC limits in Quarterly Operation Reports. ~~The project owner shall submit to the CPM the turbine operating hours and fuel use data to demonstrate compliance with the operating hour and fuel usage limits during the one-time recommissioning event in any applicable Quarterly Operation Report. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.~~

AQ-25a The project owner shall provide 24 pounds per day of VOC Emission Reduction Credits (ERCs) to the SCAQMD at the time of permit to construct issuance.

Verification: The project owner shall submit to the CPM documents to demonstrate compliance with the VOC ERCs requirement in the next Quarterly Operation Report.

AQ-27 This equipment shall not be operated unless the facility holds ~~132,444~~ **134,567** pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the operator project owner demonstrates to the **SCAQMD's** Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds ~~132,444~~ **134,738** pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Rule 2005; **6-3-2011**]

[Devices subject to this condition: D4]

This equipment shall not be operated unless the facility holds ~~4,300~~ **3,651** pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the **SCAQMD's** Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds ~~4,300~~ **3,651** pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Rule 2005; **12-4-2015; Rule 2005, 11-5-2021**]

[Devices subject to this condition: D6]

Verification: The project owner shall submit to the CPM records of all RTCs held for the Magnolia Power Project facility prior to first fire and then annually in the fourth Quarterly Operation Report. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.

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