

DOCKETED

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|-------------------------|---|
| Docket Number: | 01-AFC-24C |
| Project Title: | Palomar Energy Project Compliance |
| TN #: | 221707 |
| Document Title: | Staff Analysis of Air Quality Petition to Amend |
| Description: | N/A |
| Filer: | Marichka Haws |
| Organization: | California Energy Commission |
| Submitter Role: | Commission Staff |
| Submission Date: | 11/9/2017 4:34:13 PM |
| Docketed Date: | 11/9/2017 |

CALIFORNIA ENERGY COMMISSION

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SACRAMENTO, CA 95814-5512
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DATE: November 9, 2017

TO: Interested Parties

FROM: Leonidas Payne, Project Manager

**SUBJECT: Palomar Energy Center (01-AFC-24C)
Staff Analysis of Air Quality Petition to Amend**

The Palomar Energy Center (PEC), a combined-cycle, natural gas-fired, 550-megawatt facility, was certified by the California Energy Commission with a Final Decision on August 6, 2003, and began commercial operation on April 1, 2006. The facility is located in the city of Escondido, in San Diego County, California.

On February 22, 2013, the San Diego Gas and Electric Company (SDG&E or petitioner) filed a petition (TN 69634) with the California Energy Commission (Energy Commission) requesting to modify the Final Decision for the PEC. This Petition to Amend (PTA) requested the Energy Commission to: (1) modify certain air quality conditions of certification to be consistent with the most recent San Diego County Air Pollution Control District (SDAPCD) air permit to operate; and (2) upgrade the advanced gas path technology for two existing General Electric Frame 7-FA combined-cycle gas turbines. The changes to the SDAPCD permit to operate were made due to changes to the PEC's Title V Permit issued by the U.S. Environmental Protection Agency.

As docketed on September 20, 2013, SDG&E requested to split the PTA into two separate amendments (TN 200539). On March 5, 2015, Energy Commission staff (staff) published an analysis of petitioner's request to update certain air quality conditions of certification (TN 203772). On April 14, 2015, during the 30-day public review period, petitioner submitted a response to staff's analysis (TN 204166). In this response petitioner requested additional clarification regarding removal of obsolete conditions, to ensure consistency with reporting requirements between the Energy Commission and the SDAPCD and to make administrative changes. No other comments were received on the staff analysis.

On December 1, 2015, SDG&E submitted a second addendum (TN 206895) to their amendment request to delete Condition of Certification **AQ-38**, which limits the annual combined fuel input into the duct burners.

As docketed on February 25, 2016, SDG&E filed a request to the Energy Commission (TN 210531) to recombine the petitions to amend to: (1) Upgrade the Advanced Gas Path Technology of the Combustion Turbine; and (2) Conform air quality conditions with the San Diego Air Pollution Control District's Permit to Operate.

To: Interested Parties for the Palomar Energy Center Project

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On June 20, 2016, SDAPCD granted SDG&E Palomar Energy Center Authority to Construct (ATC) (TN 211984 and 211985) pursuant to Rule 20 of the Air Pollution Control District Rules and Regulations.

Staff reviewed the petition, the requested changes and the response to staff's initial analysis and assessed the impacts of this proposal on environmental quality and on public health and safety. It is staff's opinion that, with the implementation of these new and/or revised air quality conditions of certification, the facility would remain in compliance with all applicable laws, ordinances, regulations, and standards (LORS), and the proposed changes would not result in any significant, adverse, direct, indirect, or cumulative impacts to the environment (Cal. Code of Regs., tit. 20, § 1769). Staff recommends approval of the petition at the December 13, 2017 Business Meeting of the California Energy Commission.

The Energy Commission's webpage for this facility, <http://www.energy.ca.gov/sitingcases/palomar/>, has a link to the petition and staff's analysis on the right side of the webpage in the box labeled "Compliance Proceeding." Click on the "Documents for this Proceeding (Docket Log)" option. The Energy Commission's Order regarding this petition will also be available from the same webpage.

This notice is being mailed to the Energy Commission's list of interested parties and property owners adjacent to the facility site. It has also been emailed to the facility listserv. The listserv is an automated Energy Commission system by which information about this facility is emailed to parties who have subscribed. To subscribe, go to the Commission's webpage for this facility, cited above, scroll down the right side of the project webpage to the box labeled "Subscribe," and provide the requested contact information.

Any person may comment on the staff analysis. Those who wish to comment on the analysis are asked to submit their comments by 5:00 p.m., December 11, 2017. To use the Energy Commission's electronic commenting feature, go to the Energy Commission's webpage for this facility, cited above, click on either the "Comment on this Proceeding" or "Submit e-Comment" link. Be sure to include the facility name in your comments. Once submitted, the Energy Commission Dockets Unit reviews and approves your comments, and you will receive an e-mail with a link to them.

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

California Energy Commission
Dockets Unit, MS-4
Docket No. 01-AFC-24C
1516 Ninth Street
Sacramento, CA 95814-5512

All comments and materials filed with, and approved by, the Dockets Unit, will be added to the facility Docket Log and become publicly accessible on the Energy Commission's webpage for the facility.

If you have questions about this notice, please contact Leonidas Payne, Project Manager, at (916)651-0966, or via e-mail to leonidas.payne@energy.ca.gov.

For information on participating in the Energy Commission's review of the petition, please call the Public Adviser at (800) 822-6228 (toll-free in California) or send your e-mail to publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail to mediaoffice@energy.ca.gov.

CC: Mail List # 7152
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PALOMAR ENERGY CENTER (01-AFC-24C)
Advanced Gas Path Upgrade and Response to Addenda to
Air Quality Petition to Amend
EXECUTIVE SUMMARY

Anwar Ali

INTRODUCTION

On February 22, 2013, the San Diego Gas & Electric Company (SDG&E or petitioner) filed a petition (TN 69634) with the California Energy Commission (Energy Commission) requesting to amend the Final Decision for the Palomar Energy Center (PEC). The changes proposed in the petition would: (1) modify certain air quality conditions of certification in the Final Decision for consistency with the most recent changes in the San Diego County Air Pollution Control District (SDAPCD) air Permit to Operate (PTO) for PEC and (2) upgrade the Advanced Gas Path (AGP) technology for two existing combined-cycle gas combustion turbines.

As docketed on September 20, 2013, SDG&E requested to bifurcate the amendment into separate amendments due to potential timing constraints relating to the Advanced Gas Path upgrade (TN 200539).

On March 5, 2015, Energy Commission staff (staff) published an analysis of petitioner's request to update certain air quality conditions of certification (TN 203772).

On April 14, 2015, during the 30-day public review period, petitioner submitted a response to staff's analysis as an addendum to their request to modify their permit conditions (TN 204166). The addendum limited their requests to:

1. Removal of several construction period air quality conditions of certification that no longer applied and were thus obsolete;
2. Ensure consistency with reporting requirements between the Energy Commission and SDAPCD by rewording several verification requirements for specific conditions of certification; and
3. Make additional administrative changes.

On December 1, 2015, SDG&E submitted a second addendum (TN 206895) to their amendment request to delete condition of certification **AQ-38**, which limits the annual combined fuel input into the duct burners.

As docketed on February 25, 2016, SDG&E filed a request to recombine the two original amendments initially submitted on February 22, 2013.

On June 20, 2016, SDAPCD granted SDG&E Palomar Energy Center Authority to Construct (ATC) pursuant to Rule 20 of the Air Pollution Control District Rules and Regulations (TN 211984 and 211985).

On June 21, 2016, SDG&E requested the Energy Commission not to incorporate the new air quality conditions 50 through 55 included in the SDAPCD's new ATC, on the basis that these conditions would not be included in the future PTO issued by SDAPCD (TN 213840).

The purpose of the Energy Commission's review process is to assess any impacts the proposed modifications would have on environmental quality and on public health and safety. The process includes an evaluation of the consistency of the proposed changes with the Energy Commission's Final Decision and an assessment of whether the project, as modified, would remain in compliance with applicable laws, ordinances, regulations, and standards (LORS) (Cal. Code Regs., tit. 20, § 1769).

Staff's analysis focuses on the AGP upgrade, responding to SDG&E's April 2015 and December 2015 addenda to their amendment request, and updating conditions of certification to be consistent with SDAPCD's new ATC for the turbines and current PTO for the emergency engine.

PROJECT LOCATION AND DESCRIPTION

The PEC is a 550-megawatt (MW), combined-cycle, natural-gas-fired generating facility, located in the city of Escondido, in San Diego County, California. The project was certified by the Energy Commission on August 3, 2003, and began commercial operation on April 1, 2006.

DESCRIPTION OF PROPOSED MODIFICATIONS

The modifications proposed in the petition are based on the need to upgrade the AGP technology, delete some air quality conditions of certification, and to revise other air quality conditions of certification in the Final Decision for consistency with the most recent SDAPCD air permits.

Air Quality Table 2, beginning on page 9 of the **Air Quality** section, lists each of the proposed changes to the air quality conditions of certification. Several conditions are obsolete and are no longer needed. Some other changes involve renumbering to match condition numbers used by the SDAPCD. Additional changes, including changes to verification language requested by the project owner, are included and new conditions are added to match the ATC/PTO issued by the SDAPCD. The reader is referred to the table to understand the scope of each change.

NECESSITY FOR THE PROPOSED MODIFICATIONS

The proposed revisions to applicable air quality conditions of certification are necessary to be consistent with the SDAPCD's current permit requirements. Modifications to the air quality conditions of certification in the Final Decision would allow the project to continue to operate in compliance with the Energy Commission and the SDAPCD.

STAFF'S ASSESSMENT OF THE PROPOSED PROJECT CHANGES

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

**Executive Summary Table 1
Summary of Impacts for Each Technical Area**

| TECHNICAL AREAS REVIEWED | STAFF RESPONSE | | | Revised Conditions of Certification Recommended |
|--|-----------------------------|--|----------------------|---|
| | Technical Area Not Affected | No Significant Environmental Impact or LORS Inconsistency* | Process As Amendment | |
| Air Quality | | | X | Yes |
| Biological Resources | X | | | |
| Cultural Resources | X | | | |
| Efficiency | X | | | |
| Facility Design | X | | | |
| Geological & Paleontological Resources | X | | | |
| Hazardous Materials Management | X | | | |
| Land Use | X | | | |
| Noise & Vibration | X | | | |
| Public Health | | X | | No |
| Socioeconomics | X | | | |
| Soil & Water Resources | X | | | |
| Traffic & Transportation | X | | | |
| Transmission Line Safety & Nuisance | X | | | |
| Transmission System Engineering | X | | | |
| Visual Resources | X | | | |
| Waste Management | X | | | |
| Worker Safety & Fire Protection | X | | | |

*There is no possibility that the proposed modifications may have a significant effect on the environment, and the modifications will not result in a change in or deletion of a condition adopted by the Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (Cal. Code Regs., tit. 20, § 1769 (a)(2)).

Staff has determined that the following technical or environmental areas are not affected by the proposed changes: **Biological Resources, Cultural Resources, Facility Design, Efficiency, Geological & Paleontological Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Socioeconomics, Soil & Water Resources, Traffic & Transportation, Transmission Line Safety and Nuisance, Transmission System Engineering, Visual Resources, Waste Management, and Worker Safety & Fire Protection.**

For the **Public Health** technical area, although staff determined that the proposed modifications would increase air emissions, staff does not expect these increases to cause any significant adverse cancer, short-term, or long-term health effects on any members of the public, including low income and minority populations, from the project's emissions. Therefore, staff determined that the proposed project modifications would not have any significant effect on the environment, and no revisions or new conditions of certification are needed to ensure project's compliance with all applicable LORS.

Air quality staff determined the proposed project changes would affect the **Air Quality** technical area and has proposed modifications to several air quality conditions of certification in order to assure compliance with LORS and to reduce potential environmental impacts to a less than significant level.

ENVIRONMENTAL JUSTICE (EJ)

Environmental Justice – Figure 1 shows 2010 census blocks in the six-mile radius of the Palomar Energy Center with a minority population greater than or equal to 50 percent. The population in these census blocks represents an EJ population based on race and ethnicity as defined in the US Environmental Protection Agency's (EPA) *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

Based on the American Community Survey (ACS) data in **Environmental Justice – Figure 2** and presented in **Environmental Justice – Table 1**, staff concluded that when compared with the below-poverty-level population in San Diego County, the cities of Escondido and San Marcos have a higher percent of people living below the poverty level, and thus are considered an EJ population based on low income.

Based on California Department of Education data, staff concluded that the percentage of those living in the Escondido Union Elementary School District (in a six mile radius of the project site) and enrolled in the free or reduced price meal program are comparatively greater than those in the reference geography, and thus are considered an EJ population based on low income as defined in EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Action*.

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

| GEOGRAPHIES IN A SIX-MILE RADIUS | Total Population* | Population Below Poverty Level | Percent Below Poverty Level (%) |
|--|---------------------------|--------------------------------|---------------------------------|
| | Estimate | Estimate | Estimate |
| Escondido | 147,387 ±325 | 27,578 ±1,980 | 18.7 ±1.3 |
| San Marcos | 88,558 ±253 | 14,139 ±1,588 | 16.0 ±1.8 |
| REFERENCE GEOGRAPHY | | | |
| San Diego County | 3,143,203 ±2,532 | 454,876 ±9,006 | 14.5 ±0.3 |
| | | | |
| SCHOOL DISTRICTS IN SIX-MILE RADIUS | Enrollment Used for Meals | Free or Reduced Price Meals | |
| Escondido Union Elementary School District | 19,067 | 12,601 | 66.1% |
| Rancho Santa Fe Elementary School District | 675 | 7 | 1.0% |
| REFERENCE GEOGRAPHY | | | |
| San Diego County | 504,603 | 259,517 | 51.4% |
| Notes: Population for whom poverty is determined. Staff's analysis of the estimates returned coefficient of variation values less than 15, indicating the data is reliable. Sources: United States Census Bureau, S1701 POVERTY STATUS IN THE PAST 12 MONTHS- 2011 – 2015 American Community Survey 5-Year Estimates, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml . California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2015-2016, < http://dq.cde.ca.gov/dataquest/ >. | | | |

If affected, the following technical areas discuss 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, and Waste Management.** None of these areas are affected by the proposed petition other than **Air Quality** and **Public Health**. In the technical area **Air Quality**, staff proposes changes to conditions of certification in the Decision and new conditions of certification. Staff has determined that by adopting the proposed changes to the existing conditions of certification and the new conditions of certification, the amended project would not cause significant air quality impacts. For **Public Health**, staff has determined that the impacts of the proposed modifications would be less than significant. Therefore, impacts would be less than significant for any population in the project's six-mile radius, including the EJ population represented in **Environmental Justice – Figure 1, Figure 2, and Table 1.**

STAFF RECOMMENDATIONS AND CONCLUSIONS

Staff concludes that with the adoption of the attached conditions of certification, the modified PEC would continue to comply with applicable LORS. The proposed changes would not result in significant impacts with the implementation of the revised conditions of certification.

Air Quality Table 2, beginning on page 9 of the **Air Quality** section, lists each of the proposed changes. Several conditions are obsolete and no longer needed. Some other changes involve renumbering to match conditions numbers used by the SDAPCD. Additional changes, including changes to verification language requested by the project owner, are included and new conditions are added to match the ATC/PTO issued by the SDAPCD.

With the implementation of the proposed modifications to the air quality conditions of certification, staff concludes the following required findings, mandated by California Code of Regulations, Title 20, section 1769 (a)(3), are met, and therefore recommends approval of the petition by the Energy Commission:

The proposed modifications are justified because the U.S. Environmental Protection Agency Title V permit to operate has been modified since the Energy Commission certification, which requires modifications to the applicable Energy Commission air quality conditions of certification.

There would be no new or additional unmitigated, significant environmental impacts associated with the proposed modification(s);

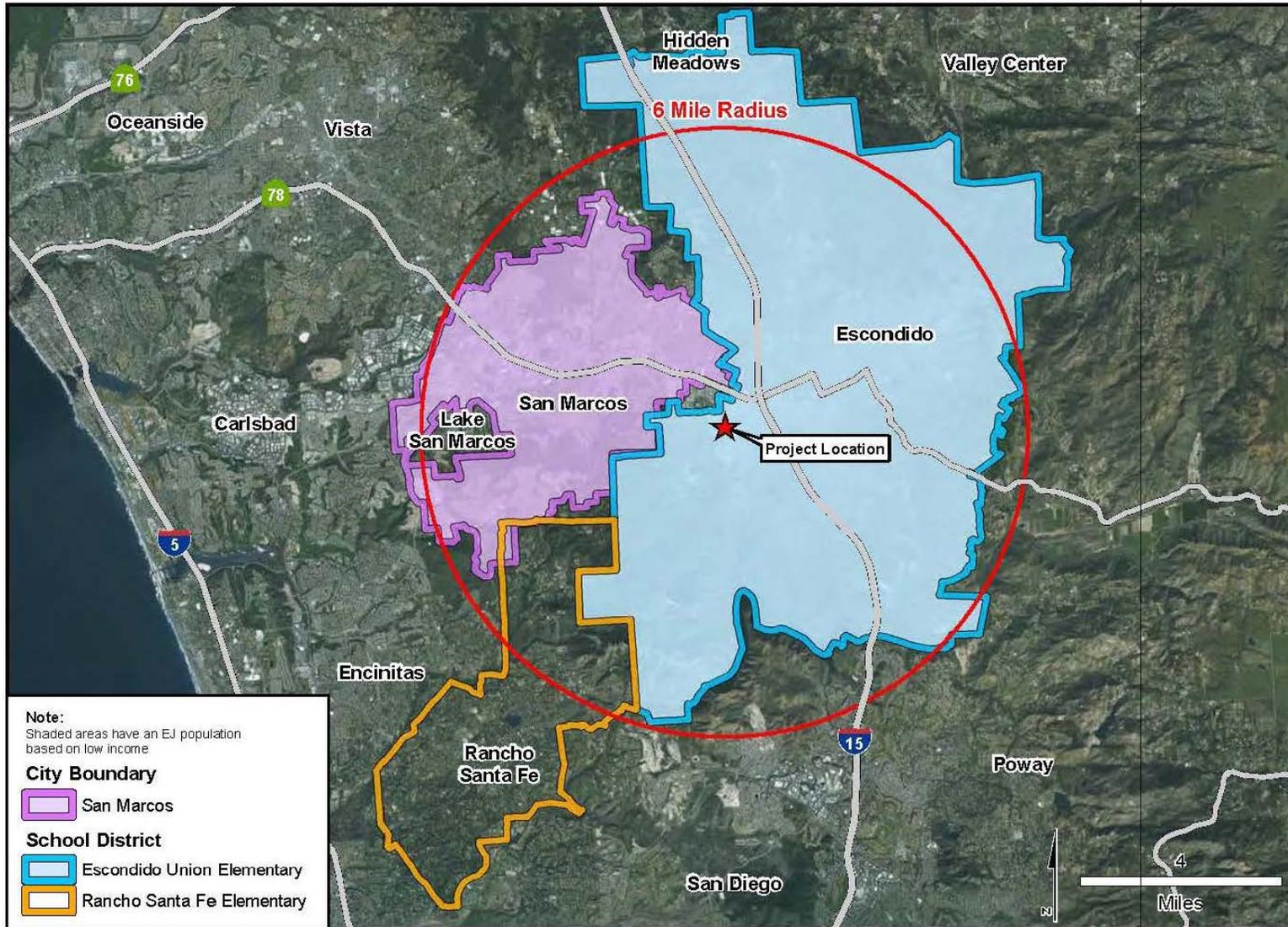
The facility would remain in compliance with all applicable LORS; and

The proposed modifications would be beneficial to the project owner because the AGP upgrades would improve performance, operational flexibility, fuel capability, and serviceability.

REFERENCES

- CDE 2017 – California Department of Education, Educational Demographics Unit, Data Quest, Select District Level Data for the year 2016 - 2017, <<http://dq.cde.ca.gov/dataquest>>.
- CEC 2015 – California Energy Commission. Staff Analysis for Palomar Energy Center (PEC) to Amend Air Quality Conditions of Certification (TN 203772) dated March 5, 2015.
- SDGE 2013a – San Diego Gas & Electric. Petition for Amendment to Upgrade the Advanced Gas Path Technology of the Combustion Turbines and to Conform Air Quality Conditions of Certification with Permit Conditions of the Revised Permit to Operate (TN 69634) dated February 22, 2013.
- SDGE 2013b – San Diego Gas & Electric. Petition to separate two amendments from SDG&E (TN 200539) dated September 20, 2013.
- SDGE 2015a – San Diego Gas & Electric. Palomar Energy Center Addendum to Air Quality Petition to Modify (TN 204166) dated April 14, 2015.
- SDGE 2015b – San Diego Gas & Electric. Palomar Energy Center Second Addendum to Petition for Change of Condition of Certification Concerning Air Quality (TN 206895) dated December 1, 2015.
- SDGE 2016a – San Diego Gas & Electric. Palomar Energy Center Request to Combine Petitions to Amend (TN 210531) docketed on February 25, 2016.
- SDGE 2016b – San Diego Gas & Electric. Palomar Energy Center Request not to include in the California Energy Commission amendment analysis the San Diego Air Pollution Control District (SDAPCD) Condition 50 through 55 incorporated in the Authority to Construct (ATC) (TN 213840) dated June 21, 2016.
- US Census 2010a – United States Census Bureau, QT-PL-Race, Hispanic or Latino, Age, and Housing Occupancy: 2010 – Census Redistricting Data (Public Law 94-171) Summary File, Tables P1, P2, P3, P4, H1, <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>.
- US Census 2016b – United States Census Bureau, S1701 POVERTY STATUS IN THE PAST 12 MONTHS- 2011 – 2015 American Community Survey 5-Year Estimates, <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>.
- US EPA 2015 – United States Environmental Protection Agency, Guidance on Considering Environmental Justice During the Development of Regulatory Actions, May 2015, <<https://www.epa.gov/environmentaljustice/guidance-considering-environmental-justice-during-development-action>>.

ENVIRONMENTAL JUSTICE - FIGURE 2
 Palomar Energy Center - Environmental Justice Population Based on Low Income



CALIFORNIA ENERGY COMMISSION - SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION
 SOURCES: TIGER Data, S1701 ACS 5-Year Estimates, CA Dept. of Education Data Quest

PALOMAR ENERGY CENTER (01-AFC-24C)
Staff Analysis of Advanced Gas Path Upgrade and Response to Addenda to
AIR QUALITY

Petition to Amend

Wenjun Qian, Ph.D., P.E., and Gerry Bemis, P.E.

SUMMARY OF CONCLUSIONS

Staff finds that with the adoption of the revised and renumbered conditions of certification, the modified Palomar Energy Center (PEC) would continue to comply with applicable federal, state and San Diego Air Pollution Control District (SDAPCD) air quality laws, ordinances, regulations and standards (LORS), and that the modified PEC would not result in significant air quality-related impacts.

INTRODUCTION

On February 22, 2013, San Diego Gas and Electric (SDG&E or petitioner) submitted an amendment request to upgrade the Advanced Gas Path (AGP) technology of the combustion turbines at PEC and to make the Energy Commission's conditions of certification consistent with their then-current federal Title V permit (SDGE 2013a). As docketed on September 20, 2013, SDG&E requested staff to proceed at that time with only their request to update air quality conditions of certification (SDGE 2013b). On March 5, 2015, staff docketed staff's analysis (CEC 2015) of petitioner's September 20, 2013 request to update conditions of certification. On April 14, 2015, SDG&E submitted an addendum to their request to modify their permit conditions (SDGE 2015a) in the following manner:

1. Remove several construction period conditions that no longer applied and were thus obsolete;
2. Make their reporting obligations to the Energy Commission consistent with that required by SDAPCD by rewording several verification requirements for specific conditions of certification; and
3. Make additional administrative changes.

On December 1, 2015, SDG&E submitted a second addendum (SDGE 2015b) to their amendment request to delete Condition of Certification **AQ-38**, which limits the annual combined fuel input into the duct burners.

As docketed on February 25, 2016, SDG&E requested the Energy Commission to recombine the AGP upgrade amendment with the modification of the air quality conditions (SDGE 2016a). SDAPCD performed an engineering evaluation (SDAPCD 2016a) for the AGP upgrade and issued a new authority to construct (ATC [SDAPCD 2016b]).

This analysis focuses on the AGP upgrade, responding to SDG&E's April 2015 and December 2015 addenda to their amendment request, and updating conditions of certification to be consistent with SDAPCD's new ATC for the turbines and current Permit to Operate (PTO) for the emergency engine. These changes would fully align the Energy Commission's conditions of certification and the SDAPCD's permit conditions.

SUMMARY OF THE DECISION

The PEC was certified by the Energy Commission on August 6, 2003. The 2003 Final Commission Decision (CEC 2003b) concluded that implementation of the conditions of certification and the mitigation measures described in the evidentiary record ensure the PEC will conform with all applicable LORS relating to air quality.

LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

The 2003 Final Staff Assessment (FSA [CEC 2003a]) included a detailed analysis of the LORS. Staff has not identified any additional applicable LORS relative to the current amendment request. However, the applicable SO₂ ambient air quality standards (AAQS) have been updated since the 2003 FSA. The currently applicable SO₂ AAQS are: state 1-hour standard of 655 µg/m³, federal 1-hour standard of 196 µg/m³, and state 24-hour standard of 105 µg/m³. Staff used these updated SO₂ AAQS in the analysis below.

COMPLIANCE WITH LORS

The SDAPCD performed an engineering evaluation for the proposed AGP upgrade (SDAPCD 2016a), which includes a LORS compliance analysis. Compliance with LORS was demonstrated to the SDAPCD's satisfaction in their engineering evaluation. Energy Commission staff reviewed the SDAPCD analysis and agree that the amended project will comply with LORS.

SDAPCD Prohibitory Rules

The only requirement affected by the AGP upgrade is the NO_x emission concentration limit of Rule 69.3.1, which depends on efficiency. However, since the AGP upgrade would result in an increase in efficiency, the allowable emission concentration under Rule 69.3.1 would increase. But SDG&E did not propose to change the NO_x emission limit in the approved conditions. Therefore the modified PEC is expected to comply with all applicable prohibitory rules.

New Source Review (NSR)

Rule 20.3(a) – Applicability. The PEC was approved as a major source as defined by SDAPCD Rule 20.1; therefore, Rule 20.3 applies to the PEC. SDG&E and SDAPCD determined to limit the oxides of nitrogen (NO_x), carbon monoxide (CO), and inhalable particulate matter (PM₁₀) emissions to 99 tons per year (ton/yr.) and volatile organic compounds (VOC) emissions to 49 ton/yr. for PEC. With the revised permit limits, PEC

is expected to be a major source of NO_x (with major source threshold of 50 ton/yr. for NO_x) for NSR but would not be a major source for Prevention of Significant Deterioration (PSD).

Rule 20.3(d)(1)(i) – Best Available Control Technology (BACT). Except as provided in Subsection (d)(1)(v), any new or modified emission unit which has any increase in its potential to emit (PTE) of PM₁₀, NO_x, VOC, or oxides of sulfur (SO_x) and which has a post-project potential to emit of 10 pounds per day (lbs./day) or more of PM₁₀, NO_x, VOC or SO_x shall be equipped with BACT for each such air contaminant. The PTE of PM₁₀, NO_x, VOC and SO_x from each PEC turbine all exceed 10 lbs./day. However, BACT requirements are triggered for a modification only if there is an emission increase for that pollutant. The SDAPCD finds that there would be no increase for NO_x, VOC, or PM₁₀ emissions due to the AGP upgrade. There would be a minor increase in SO_x emissions based on the estimated increase in fuel use, so BACT requirements are only triggered for SO_x. However, the increase in the SO_x PTE would be less than 1 ton/yr.; therefore, SDAPCD determined that no add-on controls are cost-effective. For the approved PEC, the BACT for SO_x is the use of PUC quality natural gas with sulfur content of no more than 0.75 grains/100 standard cubic feet (gr/100 scf).

Rule 20.3(d)(1)(v) – Lowest Achievable Emission Rate (LAER). The SDAPCD determined that the AGP upgrade would not result in a new major source or major modification, therefore LAER is not required.

Rule 20.3(d)(2)(i) – Air Quality Impact Analysis (AQIA). This rule requires new/modified sources that exceed the AQIA trigger levels to perform an AQIA. The AGP upgrade would not result in an increase in PTE above the AQIA trigger levels; therefore, the SDAPCD did not require an AQIA.

Rule 20.3(d)(3) – Prevention of Significant Deterioration (PSD). The PEC was analyzed and approved as a PSD source based on the estimated PTE of NO_x, CO, and PM₁₀ in excess of 100 ton/yr. However, based on review of the actual operating history of the PEC, SDG&E and SDAPCD have determined that the facility can be operated with a PTE of less than 99 ton/yr. of each of these pollutants. To ensure enforceability, SDAPCD revised conditions 18, 19, and 20 (see new Conditions of Certification **AQ-18**, **AQ-19**, and **AQ-20**) to ensure that emissions of NO_x, CO, and PM₁₀ do not exceed 99 ton/yr. and emissions of VOC do not exceed 49 ton/yr. Therefore, the modified PEC would not be considered a PSD source under SDAPCD rules.

Rule 20.3(d)(4) – Public Notice and Comment. The AGP upgrade would not require an AQIA, would not result in an emission increase of VOC in excess of 250 lbs./day or 40 ton/yr., and would not be considered a modification for PSD purposes. Therefore, no public notice was required under this section. However, as discussed in the Title V section below, the SDAPCD processed the AGP upgrade application under their "enhanced authority to construct (ATC)" procedure which included the same public notice requirement that would have been required under this rule.

Rule 20.3(d)(8) – LAER and Federal Offset Requirements.

As described above, the existing PEC is a major source of NO_x for NSR, but the AGP upgrade is not considered a major modification because the contemporaneous emission increase of NO_x would be zero. Therefore, LAER and federal offsets are not required.

Rule 1200 – Toxic New Source Review

The AGP upgrade may result in an increase in emissions of toxic air contaminants; therefore, the SDAPCD required a health risk assessment (HRA) to evaluate compliance with Rule 1200. The increase in maximum incremental cancer risk from the AGP upgrade would be below one in one million based on results of the HRA, and therefore the requirement regarding cancer risk is satisfied. The increase in total acute non-cancer health effects determined by the results of the HRA is below one (1.0) which satisfies the requirement for total acute non-cancer risk. The increase in total chronic non-cancer health effects determined by the results of the HRA is below one (1.0) which satisfies the requirement for total chronic non-cancer risk. See staff's Public Health analysis for this amendment request for more information.

AB3205

The AGP upgrade would not result in an emission increase within 1000 feet of a school; therefore, no public notice was required.

State and Federal Regulations

PEC is subject to 40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines. If the turbines were considered "modified" after February 18, 2005, PEC would be subject to 40 CFR Part 60, Subpart KKKK, which represents advances in NO_x controls and the use of low sulfur fuels since Subpart GG was promulgated in 1979. SDAPCD determined that the AGP upgrade does not constitute a "modification" and therefore the turbines are not subject to Subpart KKKK instead of Subpart GG. Even if the SO_x emission increase was sufficient to be considered a modification under the Subpart KKKK requirements, the turbines would only be subject to the sulfur standards provisions of Subpart KKKK. Regardless of applicability, the current natural gas sulfur limit of 0.75 gr/100 scf would ensure compliance with the Subpart KKKK sulfur standard.

Title V

SDAPCD determined that the proposed changes to the equipment and permit conditions would constitute a significant modification to the facility's Title V permit as defined in SDAPCD Rule 1401(c)(44)(iv). The revised SDAPCD permit contains additional and lowered annual emission limits that have been voluntarily accepted by SDG&E to exempt the facility from PSD and other potentially applicable requirements of SDAPCD NSR rules. To streamline the procedure to modify the Title V permit once the modifications have been completed, SDAPCD processed the AGP upgrade application under procedures to issue an "enhanced ATC". An enhanced ATC allows for public notice to be conducted as would be required for a significant modification at the time the ATC is issued, allowing the Title V permit to be modified using an administrative

amendment at the proper time. SDAPCD Rule 1410(q) contains the requirements and procedures for enhanced ATC as follows:

Rule 1410(q)(1) – Application Requirements. In accordance with SDAPCD policy for an enhanced ATC, the compliance plan is outlined within SDG&E’s application submittal documents to SDAPCD and subsequent correspondence. The information is further discussed in SDAPCD’s engineering evaluation demonstrating that all applicable requirements are satisfied. The methods that will be used to demonstrate compliance are specified in SDAPCD’s ATC.

Rule 1410(q)(2) – Authority to Construct (ATC) Requirements. This section specifies that the ATC must include a compliance schedule if the source is not already in compliance and requires the submission of an initial compliance certification no later than one year following the completion of the modification. PEC is expected to be in compliance and SDAPCD does not require a compliance schedule. ATC condition 51 (**AQ-51**) specifies the submittal of an initial compliance certification.

Rule 1410(q)(3)-(6) – Noticing Requirements (Prior to ATC Issuance). This section essentially requires the fulfillment of the same noticing requirements that would apply to a significant Title V modification. SDAPCD published the public notice in April 2016. The review/comment period ended early June 2016 and SDAPCD issued new ATC on June 20, 2016. Activation of the new ATC depends on the Energy Commission approving this amendment request.

ENVIRONMENTAL IMPACT ANALYSIS

AGP upgrade

SDG&E proposes to upgrade the AGP technology on existing Power Station Unit No. 1 and Power Station Unit No. 2, currently rated at 165 megawatts (MW) each. GE has made advancements in the hot gas path components and control system to improve fuel delivery and overall performance. The improved aerodynamics, seals and cooling design would provide higher efficiency performance and greater power output.

The increase in efficiency would be accomplished by: (1) increasing the firing temperature, (2) reducing clearances between parts in the compressor section, and (3) installing low pressure-drop combustion liners. The existing hot gas path components such as buckets, shrouds, nozzles, and associated structural elements would be replaced with new, functionally identical equipment designed to operate at higher temperatures. Replacement of the hot gas path components and additional sensors, instrumentation, controls, blowers, and piping would be included with the AGP technology to support increased operating temperatures; the parts would be fabricated from temperature resistant alloys. The proposed modification would increase the electrical output of each turbine from a nominal 165 MW to 176 MW. Maximum hourly fuel use would also increase from 1,893.6 million Btus per hour (MMBtu/hr) to 1,938.3 MMBtu/hr (SDAPCD 2016a). Efficiency would improve by reducing each turbine’s heat rate from 10,305 Btu/kWh to 9,931Btu/kWh (SDGE 2013a).

The SDAPCD's engineering evaluation shows that the facility's emission limits for NOx, CO, VOC, and PM10 would not change on an hourly basis and would decrease on an annual basis to be exempt from PSD requirements. Hourly and annual PTE for SOx emissions would increase slightly due to the increase in maximum hourly fuel use. SDAPCD estimated that the SOx PTE from both turbines combined would increase from 8.0 pounds per hour (lbs./hr.) to 8.1 lbs./hr. and from 33.1 ton/yr. to 33.9 ton/yr.

Staff performed additional analysis to evaluate the SOx impact of the AGP upgrade. The applicable SO₂ ambient air quality standards (AAQS) have been updated since the 2003 final staff assessment (FSA). The currently applicable SO₂ AAQS are: state 1-hour standard of 655 µg/m³, federal 1-hour standard of 196 µg/m³, and state 24-hour standard of 105 µg/m³. The 2003 FSA used maximum SO₂ background data from Chula Vista monitoring station during 1998-2001 (CEC 2003a). More recent data are available at the El Cajon monitoring station, which is closer to the project site. However, the SO₂ concentrations at Chula Vista were higher than those at El Cajon. To be conservative and consistent with the 2003 FSA, staff used more recent maximum SO₂ background data from Chula Vista during 2009-2011 (Chula Vista data ended after 2011 [U.S. EPA 2016]) for this amendment analysis.

Since project direct impacts are proportional to emissions, staff calculated the impact of PEC after the AGP upgrade by multiplying the SO₂ impacts shown in 2003 FSA with the ratio of the increased emission rate of 8.1 lbs./hr. to the approved emission rate of 8.0 lbs./hr.

Air Quality Table 1 summarizes the results of staff's calculation with maximum SO₂ background data from Chula Vista during 2009-2011. The total impact is the sum of the calculated SO₂ impact plus the maximum SO₂ background data. **Air Quality Table 1** shows that the total SO₂ impacts after the AGP upgrade would be well below the limiting standards.

Air Quality Table 1
PEC Routine Operation Impacts after AGP Upgrade (µg/m³)

| Pollutant | Averaging Time | Project Impact | Background | Total Impact | Limiting Standard | Percent of Standard |
|-----------------|-----------------------------|----------------|------------|--------------|-------------------|---------------------|
| SO ₂ | State 1 hour | 7.6 | 18.3 | 25.9 | 655 | 4 |
| | Federal 1 hour ^a | 7.6 | 15.7 | 23.3 | 196 | 12 |
| | 24 hour | 1.4 | 8.1 | 9.5 | 105 | 9 |

Source: CEC 2003a, U.S. EPA 2016, and additional staff analysis

Note: ^a Total predicted concentration for the federal 1-hour SO₂ standard is the maximum project impact combined with the 3-year average of 99th percentile background concentrations.

The 2003 Energy Commission Final Decision (CEC 2003b) required the facility owner to provide \$1.86 million to SDAPCD to mitigate the project's PM10 and PM10 precursor emissions (including SOx). The PM10 mitigation fee was paid according to the timeline

specified in Condition of Certification **AQ-SC10** (therefore, SDG&E proposed to delete this condition). The annual PM10 emissions were approved to be 108 ton/yr. (CEC 2003b), while the new ATC will limit the annual PM10 emissions to 99 ton/yr. (with a reduction of 9 ton/yr.). After the AGP upgrade, the annual SOx PTE would increase from 33.1 ton/yr. to 33.9 ton/yr. (an increase of 0.8 ton/yr.). The total mitigation needed for PM10 and SOx combined after the AGP upgrade would be less than that for the approved project. Staff believes that no additional CEQA mitigation is needed for the AGP upgrade amendment.

SDAPCD added new conditions (50 through 55) to ensure PEC complies with emissions limits specified in the ATC after the AGP upgrade. SDG&E requests these new ATC conditions not to be incorporated into the current petition (SDGE 2016b). SDG&E believes that these conditions only appear on the ATC, not the future SDAPCD permit to operate. However, staff proposes to add these conditions as new Conditions of Certification **AQ-50** through **AQ-55**, even though they may only apply on a short-term basis. If SDAPCD decides to delete these conditions in the future permit to operate, SDG&E could submit an amendment request to the Energy Commission to delete them; however, such an amendment would not be required, as the Conditions **AQ-50** to **AQ-55** would neither impair long term operations nor the ability to remain in compliance with other conditions of certification.

Staff does not expect the work activities related to the AGP upgrade to result in impacts different from those from maintenance and repair that could occur under authorization of the existing Energy Commission Decision.

Condition of Certification AQ-38

SDG&E requested deletion of **AQ-38**. The SDAPCD originally put the duct burners' fuel limit in both the Preliminary and Final Determination of Compliance (PDOC and FDOC) to limit annual emissions since the duct burners were estimated to operate for 2,000 hours per year each. For simplification of the PTO, the SDAPCD required the mass emissions limits to be kept only in the PTO evaluation. The FDOC estimated the worst-case annual NOx emissions to be 124.4 ton/yr., which was based on the operation of the turbines with 2,000 hours of duct burner operation. The approved Condition of Certification **AQ-17** limits the total aggregate NOx emissions to 104.3 tons in each rolling 12-calendar month period due to limited offsets availability, which is less than the originally estimated 124.4 ton/yr. In addition, the new ATC reduces the annual NOx emissions limit to 99 ton/yr. The new ATC also specifies hourly emissions limits (see renumbered **AQ-11**, **AQ-14**, **AQ-15**, **AQ-16**, **AQ-17**, etc.). Since the facility owner is required to keep emissions below the hourly and annual emissions limits, the SDAPCD did not find the need to retain the annual fuel limit for the duct burners. The SDAPCD deleted the corresponding condition (i.e. the previously approved **AQ-38**). Staff agrees with the SDAPCD that the previously approved **AQ-38** is unnecessary and could be deleted.

Consolidation of Conditions

Staff carefully reviewed the requested changes in SDG&E's April 2015 addendum (SDGE 2015a) and agrees that they can all be accommodated without causing adverse

air quality impacts or violate any laws, ordinances, regulations or standards. In addition, staff now proposes to renumber the conditions of certification to align them more closely with the numbering system used in the SDAPCD's new ATC.

The facility owner proposes to delete the existing construction related Conditions of Certification **AQ-SC1** through **AQ-SC4** because construction was completed and the conditions are obsolete and no longer needed. If the facility owner (SDG&E or subsequent owner) needs to conduct substantial construction at the facility at some future date, they would have to submit an amendment request for that modification and staff will review and evaluate that construction and determine whether new construction related conditions of certification would be needed to mitigate that construction. Thus, the existing construction-related Conditions of Certification **AQ-SC1** through **AQ-SC4** can be removed.

For several conditions of certification, as shown in **Air Quality Table 2** below, SDG&E proposes to provide a signed statement to certify compliance as part of the quarterly report. They do not need to provide detailed data for these permit conditions to the SDAPCD, and they assert that providing such data to staff is burdensome and not needed. Staff agrees that the volume of data is great, and that a compliance statement is sufficient. Staff reserves the right to spot-check these data with an onsite visit or by requesting the detailed data from SDG&E should any issues arise that need to be addressed with the detailed data. For these administrative changes, staff agrees these changes are acceptable and has incorporated them in the conditions of certification below.

In addition to the new ATC for the turbines, staff also reviewed the current PTO for the emergency engine generator. Staff found inconsistencies between the Energy Commission approved conditions of certification with the current PTO conditions for the emergency engine generator. Staff proposes to revise the conditions of certification to provide consistency with current SDAPCD requirements (see more details of the inconsistencies and staff proposed changes in **Air Quality Table 2**).

The SDAPCD's new ATC for the turbines and current PTO for the emergency engine generator are separate documents. In order to match the SDAPCD numbering system within one Energy Commission document, staff proposes to number conditions of certification for the combustion turbines as "**AQ-xx**", and conditions of certification for the emergency engine generator as "**AQ-EEGxx**", where "**xx**" represents numbers starting from 1 for each type of equipment. Therefore, if the condition numbering for one type of equipment changes in the future, the condition numbering for the other type of equipment would not change.

CONCLUSIONS AND RECOMMENDATIONS

The proposed facility modifications would not affect the facility's ability to continue to comply with applicable federal, state, and SDAPCD LORS. The proposed modifications would not result in significant air quality impacts, provided that the following conditions of certification are adopted. There are no air quality environmental justice issues related to this amendment request and no minority or low-income populations would be significantly or adversely impacted. Staff recommends that the revised conditions of certification be approved as shown below.

PROPOSED CONDITIONS OF CERTIFICATION

Air Quality Table 2 summarizes the conditions of certification changes proposed by the facility owner and staff's recommended response to those proposed modifications. The table uses the latest numbering system which conforms to the new ATC condition numbering for the turbines and PTO condition numbering for the emergency engine generator. The table also includes the basis for any change as currently requested by staff. The table contains staff's recommendations of how to incorporate the proposed changes into the Decision.

**Air Quality Table 2
Mapping of Energy Commission and SDAPCD Condition Numbering
with Proposed Modifications**

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|---|--|
| AQ-SC1 | (none) | Delete (obsolete) | Staff agrees. If new construction is proposed in the future, new construction conditions will be recommended by staff. |
| AQ-SC2 | (none) | Delete (obsolete) | Staff agrees. If new construction is proposed in the future, new construction conditions will be recommended by staff. |
| AQ-SC3 | (none) | Delete (obsolete) | Staff agrees. If new construction is proposed in the future, new construction conditions will be recommended by staff. |
| AQ-SC4 | (none) | Delete (obsolete) | Staff agrees. If new construction is proposed in the future, new construction conditions will be recommended by staff. |
| AQ-SC5 | (none) | Delete (obsolete) | Staff agrees. |
| AQ-SC6 | (none) | Remove redundant wording from verification. | Staff agrees. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|---|---|
| AQ-SC7 | 40 | None | First portion kept with language added to reflect AQ-39 requirement (replaces old AQ-80); last portion moved to AQ-40 . |
| AQ-SC8 | (none) | Proposed deletion in original petition. | Staff proposes to keep this condition and the facility owner now agrees. Staff proposes to reword verification to allow facility owner to certify compliance. |
| AQ-SC9 | (none) | Proposed deletion in original petition. | Staff proposes to keep this condition and the facility owner now agrees. Staff proposes to reword verification to allow facility owner to certify compliance. |
| AQ-SC10 | (none) | Delete (obsolete) | Staff agrees. |
| AQ-SC11 | 8 | Proposed revision of AQ-SC11 with wording from SDAPCD permit condition 8 in original petition. | Instead of revising AQ-SC11 , staff proposes to delete it and move the last portion to AQ-8 to match ATC. |
| AQ-SC12 | (none) | None | Delete (obsolete) |
| AQ-SC13 | (none) | None | Retain; reworded verification to allow facility owner to certify compliance. |
| AQ-1 | 1 | None | Renumber old AQ-2 as new AQ-1 and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-2 | 2 | Revise old AQ-8 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-3 | 3 | Revise old AQ-53 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-4 | 4 | Add as a new condition | Staff agrees. Renumber to match ATC. |
| AQ-5 | 5 | Revise old AQ-31 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner-requested verification language is included. |
| AQ-6 | 6 | Revise old AQ-32 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner-requested verification language is included. |
| AQ-7 | 7 | Revise old AQ-33 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner-requested verification language is included. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|--|--|
| AQ-8 | 8 | Proposed revision of AQ-SC11 with wording from SDAPCD permit condition 8 in original petition. | Instead of revising AQ-SC11 , staff proposes to delete it and move the last portion to AQ-8 to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-9 | 9 | Replace old AQ-27 with old AQ-20 ; revise old AQ-20 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Delete old AQ-27 ; renumber old AQ-20 as AQ-9 and revise to match ATC. Facility owner-requested verification language is included. |
| AQ-10 | 10 | Add as a new condition. | Staff agrees. Renumber to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-11 | 11 | Revise old AQ-42 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC. |
| AQ-12 | 12 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-13 | 13 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-14 | 14 | Revise old AQ-36 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-15 | 15 | Revise old AQ-37 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-16 | 16 | Replace old AQ-21 with old AQ-24 ; revise old AQ-24 to match SDAPCD permit requirements; allow certification by facility owner. | Instead of the facility owner proposed revisions, staff proposes to delete old AQ-24 , renumber old AQ-21 as AQ-16 and revise to match ATC. Facility owner requested verification language is included. |
| AQ-17 | 17 | Replace old AQ-22 with old AQ-26 ; revise old AQ-26 to match SDAPCD permit requirements; allow certification by facility owner. | Instead of the facility owner proposed revisions, staff proposes to delete old AQ-26 , renumber old AQ-22 as AQ-17 and revise to match ATC. Facility owner requested verification language is included. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|---|---|
| AQ-18 | 18 | Revise old AQ-17 to match previous version of SDAPCD permit requirements; allow certification by facility owner. | The emissions limits have been reduced in the new ATC. Staff proposes to renumber old AQ-17 and revise to match the revised emissions limits in the new ATC. Facility owner requested verification language is included. |
| AQ-19 | 19 | Allow certification by facility owner. | VOC emissions limit in old AQ-18 is reduced and specified in new AQ-18 . Staff proposes to delete old AQ-18 and add new ATC condition 19 as new AQ-19 to specify requirements if the facility owner proposes to make any changes to the annual emission calculation protocol. Facility owner requested verification language is included. |
| AQ-20 | 20 | Revise old AQ-19 to match old SDAPCD permit requirements. | The wording in the new ATC has changed. Staff proposes to renumber old AQ-19 as AQ-20 and revise to match the new ATC. Staff proposes to reword verification to allow facility owner to certify compliance. |
| AQ-21 | 21 | None | Renumber old AQ-48 as AQ-21 and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-22 | 22 | Revise old AQ-35 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-23 | 23 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-24 | 24 | Add as a new condition. | Staff agrees. Renumber to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-25 | 25 | Revise AQ-25 to match SDAPCD permit requirements. | Staff agrees. Retain the condition number and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-26 | 26 | Add as a new condition. | Staff agrees. Renumber to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-27 | 27 | Revise old AQ-41 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-28 | 28 | Replace old AQ-40 with old AQ-39 ; revise old | Staff agrees. Delete old AQ-40 ; renumber old AQ-39 as AQ-28 and |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|--|---|
| | | AQ-39 to match SDAPCD permit requirements; allow certification by facility owner. | revise to match ATC. Facility owner requested verification language is included. |
| AQ-29 | 29 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-30 | 30 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-31 | 31 | Add as a new condition. | Staff agrees. Renumber to match ATC. |
| AQ-32 | 32 | Revise old AQ-47 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC. |
| AQ-33 | 33 | Suggested revision of old AQ-15 with wording from SDAPCD permit condition 33; suggested revision of old AQ-16 with rewording from SDAPCD permit condition 35. | Instead of the facility owner proposed revisions, staff proposes to delete old AQ-15 , revise old AQ-16 and renumber it as AQ-33 to match ATC condition 33. Language now matches ATC. |
| AQ-34 | 34 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-35 | 35 | Old AQ-78 was redundant to old AQ-16 ; suggested revision of old AQ-16 with rewording from SDAPCD permit condition 35; suggested deletion of old AQ-78 . | Instead of deleting old AQ-78 , staff proposes to renumber it as AQ-35 to match ATC condition 35. Staff proposes to delete the last sentence in the new AQ-33 so that language is no longer redundant. |
| AQ-36 | 36 | Revise old AQ-13 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-37 | 37 | Replace old AQ-50 and old AQ-51 with old AQ-9 ; revise old AQ-9 to match SDAPCD permit requirements. | Staff agrees. Delete old AQ-50 and old AQ-51 ; renumber old AQ-9 as AQ-37 and revise to match ATC. |
| AQ-38 | 38 | Add as a new condition; allow certification by facility owner. | Staff agrees. Renumber to match ATC. Facility owner requested verification language is included. |
| AQ-39 | 39 | Old AQ-80 duplicates AQ-SC7 ; Old AQ-80 can be removed. | Staff propose to retain old AQ-80 and renumber it as AQ-39 to match ATC; reworded verification to allow facility owner to certify compliance. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|--|---|
| AQ-40 | 40 | None | Last portion of AQ-SC7 moved to AQ-40 to match ATC; provided verification to allow facility owner to certify compliance. |
| AQ-41 | 41 | Revise old AQ-14 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC. |
| AQ-42 | 42 | Revise old AQ-12 to match SDAPCD permit requirements. | Staff agrees. Renumber and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-43 | 43 | Revise old AQ-29 to match SDAPCD permit requirements; allow certification by facility owner. | Staff agrees. Renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-44 | 44 | Add as a new condition. | Staff agrees. Renumber to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-45 | 45 | Replace old AQ-1 with old AQ-52 ; revise old AQ-52 to match SDAPCD permit requirements. | Staff agrees. Delete old AQ-1 ; renumber old AQ-52 as AQ-45 and revise to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-46 | 46 | None | Renumber old AQ-3 as AQ-46 and revise to match ATC; deleted second sentence in the verification, which duplicates the condition itself. |
| AQ-47 | 47 | Allow certification by facility owner. | Staff proposes to renumber and revise to match ATC. Facility owner requested verification language is included. |
| AQ-48 | 48 | None | Add as AQ-48 to match ATC. No verification required. |
| AQ-49 | 49 | Add as a new condition. | Staff agrees. Renumber to match ATC; reworded verification to allow facility owner to certify compliance. |
| AQ-50 | 50 | SDG&E requests these new ATC conditions not to be incorporated into the current petition. SDG&E believes that these conditions only appear on the ATC, not SDAPCD permit to operate. | New. Staff believes that these new conditions are needed to make sure that the modified PEC complies with emissions limits specified in the ATC after the AGP upgrade. Staff proposes to add these conditions as new conditions of certification AQ-50 through AQ-55 . If SDAPCD decides to delete these conditions in the future permit to operate, SDG&E could submit an amendment request to the Energy Commission to delete them. |
| AQ-51 | 51 | | |
| AQ-52 | 52 | | |
| AQ-53 | 53 | | |
| AQ-54 | 54 | | |
| AQ-55 | 55 | | |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|------------------------------|---------------------------------------|--|
| AQ-EEG1 | Emergency Engine Generator-1 | None | New. The current PTO specifies that the emergency engine generator should be operated exclusively during emergencies or maintenance and testing. Staff proposes to add this condition as AQ-EEG1 to match PTO. |
| AQ-EEG2 | Emergency Engine Generator-2 | None | New. The current PTO does not allow the emergency engine generator to be used as a part of non-emergency Demand Response Program. Staff proposes to add this condition as AQ-EEG2 to match PTO. |
| AQ-EEG3 | Emergency Engine Generator-3 | None | Rename old AQ-56 as AQ-EEG3 to match PTO numbering; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG4 | Emergency Engine Generator-4 | None | Rename old AQ-59 as AQ-EEG4 to match PTO numbering; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG5 | Emergency Engine Generator-5 | None | Rename old AQ-58 as AQ-EEG5 to match PTO numbering; add "Air Pollution Control District" before "Rule 50" to match PTO; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG6 | Emergency Engine Generator-6 | None | Rename and revise old AQ-57 as AQ-EEG6 to match PTO numbering and wording; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG7 | Emergency Engine Generator-7 | None | Rename old AQ-60 as AQ-EEG7 to match PTO numbering; minor revisions in wording and addition of more applicable rules to match PTO; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG8 | Emergency Engine Generator-8 | None | Rename old AQ-61 as AQ-EEG8 to match PTO numbering; revise to provide more details of the operation and maintenance requirements to match PTO; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG9 | Emergency Engine Generator-9 | None | Rename old AQ-64 as AQ-EEG9 to match PTO numbering; delete fuel certification requirement and maintenance record requirement, which are specified in AQ-EEG4 and AQ-EEG10 , to match PTO; reworded verification to allow facility owner to certify compliance. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|-------------------------------|--|---|
| AQ-EEG10 | Emergency Engine Generator-10 | None | Renumber old AQ-62 as AQ-EEG10 to match PTO numbering; revise to match PTO wording regarding the operating log requirements; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG11 | Emergency Engine Generator-11 | None | Renumber old AQ-63 as AQ-EEG11 to match PTO numbering; revise to match PTO wording; reworded verification to allow facility owner to certify compliance. |
| AQ-EEG12 | Emergency Engine Generator-12 | None | New. This condition duplicates AQ-46 . However, AQ-46 applies to the turbines, while this condition applies to the emergency engine generator. Staff proposes to add this condition as AQ-EEG12 to match PTO. |
| AQ-EEG13 | Emergency Engine Generator-13 | None | Renumber old AQ-66 as AQ-EEG13 to match PTO numbering; revise "government" to "governmental" to match PTO. No verification required. |
| AQ-EEG14 | Emergency Engine Generator-14 | None | Renumber old AQ-65 as AQ-EEG14 to match PTO numbering; revise "permittee" to "project owner" to match Energy Commission convention; reworded verification to allow facility owner to certify compliance. |
| --- | --- | NA | Old condition numbers AQ-67 through AQ-83 used in the previous version of staff analysis (CEC 2015) for this amendment request are no longer needed. Renumbering enables consolidation and these higher numbers are no longer needed. |
| --- | --- | Delete old AQ-4 , AQ-5 , and AQ-6 because compliance with these conditions was demonstrated before or during the construction period (see more details in CEC 2015). | Staff agrees. |
| --- | --- | Old AQ-7 : delete the language requiring submission of detailed plan drawing of the turbine stacks that show the sampling ports prior to construction (see more details in CEC 2015). | Staff proposes to delete old AQ-7 because compliance with the source test ports and platforms requirements was demonstrated before and during construction period. |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|--|--|
| --- | --- | Delete old AQ-10 and AQ-11 which require the facility owner to submit a CEMS protocol and a protocol of determining the CO/VOC surrogate relationship prior to initial startup. Compliance with these conditions was demonstrated prior to initial startup (see more details in CEC 2015). | Staff agrees. |
| --- | --- | Delete old AQ-23 and old AQ-28 regarding requirements for the commissioning period (see more details in CEC 2015). | Staff agrees. |
| --- | --- | Delete old AQ-30 which defines the beginning of the “on-going” operations (see more details in CEC 2015). | Staff agrees. |
| --- | --- | Delete old AQ-38 since it is obsolete and is not required to comply with the local air permit or any other LORS (SDGE 2015b). | Staff agrees. See more details in the text. |
| --- | --- | Delete old AQ-43 , AQ-44 , and AQ-45 regarding the requirements for the initial source tests, which were completed after commissioning period (see more details in CEC 2015). | Staff agrees. |
| --- | --- | Delete old AQ-49 regarding the surrender of the emission reduction credits (ERCs), which were surrendered prior to initial startup (see more details in CEC 2015). | Staff agrees. |
| --- | --- | None | Staff proposes to delete old AQ-54 since more details of the CEMS requirements are specified in new AQ-36 through AQ-42 . |

| Revised Energy Commission COCs Numbering | SDAPCD ATC/PTO Numbering | Facility Owner Proposed Modifications | Staff Proposed Modifications |
|--|--------------------------|--|------------------------------|
| -- | -- | Delete old AQ-55 , which requires submission of Title V permit application to the SDAPCD within 12 months after initial startup. Compliance with this condition was completed (see more details in CEC 2015). | Staff agrees. |

Staff recommends making the following changes to the approved conditions of certification, including renumbering the conditions to match the most recent ATC issued by the SDAPCD. Edits included in staff's analysis of petitioner's September 20, 2013 request to update conditions of certification (CEC 2015) are shown in ~~strikeout~~ and **underline bold** text. Staff's edits in response to petitioner's 2015 submission are shown in ~~double strikeout~~ and **bold and double underline**. Appendix 1 includes a clean version of the finalized conditions of certification if they are approved as proposed by staff.

AQ-SC1 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

~~The project owner shall fund all expenses for an on-site Air Quality Construction Mitigation Manager (AQ-CMM) who shall be responsible for maintaining compliance with conditions AQ-SC2 through AQ-SC4 for the entire project site and linear facility construction. The on-site AQ-CMM shall have full access to areas of construction of the project site and linear facilities, and shall have the authority to appeal to the CPM to have the CPM stop any or all construction activities as warranted by applicable construction mitigation conditions. The on-site AQ-CMM shall have a current certification by the California Air Resources Board for Visible Emission Evaluation (U.S. EPA Method 9) prior to the commencement of ground disturbance. The on-site AQ-CMM shall not be terminated without written consent of CPM.~~

~~**Verification:** At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM, for approval, the name, current CARB Visible Emission Evaluation certificate, and contact information for the on-site AQ-CMM.~~

AQ-SC2 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

~~The project owner shall provide a construction mitigation plan, for approval, which shows the steps that will be taken, and reporting requirements, to ensure compliance with conditions AQ-SC3 and AQ-SC4.~~

~~**Verification:** At least 60 days prior to start any ground disturbance, the project owner shall submit to the CPM, for approval, the construction mitigation plan.~~

AQ-SC3 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

~~The on-site AQ-CMM shall submit to the CPM, in the Monthly Compliance Report (MCR), a construction mitigation report that demonstrates compliance with the following mitigation measures:~~

- ~~a) All unpaved roads and disturbed areas in the project and linear construction sites shall be watered until sufficiently wet for every four hours of construction activities. The frequency of watering can be reduced or eliminated during periods of precipitation.~~
- ~~b) No vehicle shall exceed 15 miles per hour within the construction site.~~
- ~~c) The construction site entrances shall be posted with visible speed limit signs.~~

- ~~d) All construction equipment vehicle tires shall be washed or cleaned free of dirt prior to entering paved roadways.~~
- ~~e) Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.~~
- ~~f) All entrances to the construction site shall be treated with dust soil stabilization compounds.~~
- ~~g) Construction vehicles must enter the construction site through the treated entrance roadways.~~
- ~~h) Construction areas adjacent to any paved roadway shall be provided with sandbags to prevent run-off to the roadway.~~
- ~~i) All paved roads within the construction site shall be swept twice daily when construction activity occurs.~~
- ~~j) At least the first 500 feet of any public roadway exiting from the construction site shall be swept twice daily when construction activity occurs.~~
- ~~k) All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or be treated with appropriate dust suppressant compounds.~~
- ~~l) All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.~~
- ~~m) Where appropriate, construction areas that may be disturbed shall be equipped with windbreaks at the windward sides prior to any ground disturbance. The windbreaks shall remain in place until the soil is stabilized or permanently covered with vegetation.~~
- ~~n) Any construction activities that can cause fugitive dust shall cease when the wind exceeds 25 miles per hour.~~
- ~~o) All diesel fueled engines used in the construction of the facility shall be fueled only with ultra low sulfur diesel, which contains no more than 15 ppm sulfur.~~
- ~~p) All large construction diesel engines that have a rating of 100 hp or more, shall meet, at a minimum, the 1996 CARB or U.S. EPA certified standards for off-road equipment.~~

~~q) All large construction diesel engines, which have a rating of 100 hp or more, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types.~~

~~r) All diesel fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM that shows the engine meets the conditions ~~AQ-SC3(p)~~ and ~~AQ-SC3(q)~~ above.~~

~~**Verification:** In the MCR, the project owner shall provide the CPM a copy of the construction mitigation report and any diesel fuel purchase records, which clearly demonstrate compliance with condition ~~AQ-SC3~~.~~

AQ-SC4 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

~~No construction activities are allowed to cause visible emissions at or beyond the project site fenced property boundary. No construction activities are allowed to cause visible plumes that exceed 20 percent opacity at any location on the construction site. No construction activities are allowed to cause any visible plume in excess of 200 feet beyond the centerline of the construction of linear facilities.~~

~~**Verification:** The on-site AQCMM shall conduct a visible emission evaluation at the construction site fence line, or 200 feet from the center of construction activities at the linear facility, each time he/she sees excessive fugitive dust from the construction of linear facility site. The records of the visible emission evaluations shall be maintained at the construction site and shall be provided to the CPM in the MCR.~~

AQ-SC5 [Deleted (date of adoption) per staff analysis of Petition to Amend (SDGE 2016a)]

~~The project owner shall surrender the emission offset credits listed in the table below or a modified list, as allowed by this condition, at the time that surrender is required by Air Quality Condition ~~AQ-49~~. If additional ERCs are submitted consistent with Air Quality Conditions ~~AQ-17~~ and ~~AQ-49~~, the project owner shall submit an updated table including the additional ERCs to the CPM. The project owner shall request CPM approval for any substitutions, modifications, or additions of credits listed.~~

~~The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, the requested change(s) clearly will not cause the project to result in a significant environmental impact, and each requested change is consistent with applicable federal and state laws and regulations. If provided to increase maximum allowable emissions from 104.3 tons per year of NOx emissions to 124.4 tons per year pursuant to Condition ~~AQ-49~~, Class A ERCs issued by the District and meeting the standards of District Rule 26.1 are presumed to satisfy these criteria. If other than Class A ERCs are proposed, then the U.S. EPA shall also be consulted.~~

| District ERC Number | NOx-Equivalent (tpy) |
|--|-----------------------------|
| ERC 000111-01 | 17.5 |
| ERC 000111-02 | 0.15 (from 0.3 tpy VOC) |
| ERC 010228-01 | 7.6 (from 15.2 tpy VOC) |
| ERC 921291-01 | 20.8 |
| ERC 921291-02 | 0.5 (from 1.0 tpy of VOC) |
| ERC 976993-01 | 10.5 (from 21.0 tpy of VOC) |
| ERC 020130-02 | 3.6 |
| No ERC number, diesel engine replacement | 26.0 |
| No ERC number, boiler replacement | 38.5 |

Verification: ~~The project owner shall submit to the CPM a list of ERCs to be surrendered to the District at least 60 days prior to initial startup. When additional ERCs are submitted pursuant to Air Quality Condition **AQ-49**, the project owner shall submit the list of additional ERCs at least 60 days prior to the use of these additional ERCs. If the CPM, in consultation with the District and, in the event other than a Class A ERC is proposed, with the U.S.EPA, approves a substitution or modification, the CPM shall file a statement of the approval with the commission docket and mail a copy of the statement to every person on the post-certification mailing list. The CPM shall maintain an updated list of approved ERCs for the project.~~

AQ-SC6 ~~The project owner shall submit to the CPM for review and approval any significant modifications approved by the proposed by either the project owner or issuing agency to any project air permit.~~

Verification: ~~The project owner shall submit any significant approved the proposed air permit modifications to the CPM within the most current Quarterly Operational Report (AQ-SC7) five working days of either its submittal by the project owner to an agency, or its receipt from an agency. The project owner shall submit all modified air permits to the CPM within most current Quarterly Operational Report (AQ-SC7) 15 days of their receipt.~~

AQ-SC7 ~~The project owner shall submit Quarterly Operational Reports to the CPM and District that include operational and emissions information as necessary to demonstrate compliance with conditions **AQ-SC8, AQ-SC9, and AQ-1** through **AQ-8355-55, and AQ-EEG1 through AQ-EEG14**, as applicable. The Quarterly Operational Report will specifically note or highlight instances of noncompliance as required by AQ-39 and the corrective measures taken to correct these incidents. ~~The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 sections (d), (e), (f)(2), (f)(3), (f)(4) and (f)(5) and CEMs protocol approved by the District.~~~~

Verification: ~~The project owner shall submit the Quarterly Operational Reports to the CPM and the District no later than 30 days following the end of each calendar quarter as required by Rule 19.2 section (d).~~

AQ-SC8 ~~The project owner shall provide a flow meter to determine the daily cooling tower circulating water flow and shall monitor and record the daily flow.~~

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission, ~~submit to the CPM the daily cooling tower recirculating water flow data in the Quarterly Operational Reports (AQ-SC7).~~

AQ-SC9 The cooling tower annual PM10 emissions shall be limited to 5.7 ton/year. The project owner shall estimate annual PM10 emissions from the cooling tower using the water quality testing data and recirculating water flow data collected on a quarterly basis (**AQ-SC8** and **AQ-3522**). The water quality testing data shall show the total dissolved solids, the pH, and the ammonia concentration of the cooling water.

The cooling tower shall be equipped with drift eliminators with an efficiency of 0.0005 percent.

Verification: The project owner shall certify compliance with this condition as part of the ~~submit to the CPM annual cooling tower PM10 emission estimates in the Quarterly Operational Reports (AQ-SC7)~~ and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-SC10 ~~[Deleted (date of adoption) per staff analysis of Petition to Amend (SDGE 2016a)]~~

~~The project owner shall provide \$1.86 million, for programs of the San Diego County Air Pollution Control District to mitigate potential PM10 and PM10 precursor impacts in the region around the Palomar Energy Project. The payment shall be provided to the District, which will allocate the funds to programs expected to provide reductions in the specified area. The \$1.86 million payment includes an administration fee of no greater than ten percent to the District for costs to advertise, evaluate, contract and administer diesel source emission reduction projects.~~

~~The project owner shall provide the \$1.86 million in two installments. The first installment will be in the amount of \$1.57 million for projects and District costs, and will be submitted to the District no later than the date of delivery of the first combustion turbine to the project site. The project owner shall provide the remaining \$290,000 to the District no later than the date of surrendering the additional Emission Reduction Credits described in AQ-49.~~

~~The project owner shall demonstrate that a good faith effort has been made to develop an agreement with the District to include the following:~~

- ~~1) the District shall provide the project owner with a quarterly report that includes a description of the funded mitigation or contracted projects, the cost of each project, and estimated cost-effectiveness of the emission reduction projects;~~

- 2) ~~for up to two years from the date of a payment by the project owner, the District will give first right of refusal to diesel source mitigation projects in the Escondido area;~~
- 3) ~~the District shall actively pursue mitigation projects by advertising through its Carl Moyer Program, Lower Emission School Bus Program, and Vehicle Registration Fund Program, as well as working directly with projects that may be developed by the project owner or in the course of normal district business;~~
- 4) ~~if, after two years from the date of payment, the District has been unable to identify sufficient projects to expend all fees paid, the project owner shall assist in identifying additional diesel source mitigation projects throughout the North San Diego County area; and~~
- 5) ~~the District shall restrict use of fees paid to diesel source reduction projects in the North San Diego County area, only.~~

Verification: ~~Copies of each payment transmitted and a record of the agreement with the District shall be provided to the CPM within 20 days after delivery of the each payment to the District. The project owner shall submit to the CPM, in a Quarterly Report, a summary of mitigation projects, costs, and cost effectiveness of emission reductions, as provided by the District.~~

AQ-SC11 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

~~The emissions of ammonia (ammonia slip) from each gas turbine exhaust stack following the SCR controls shall not exceed 5.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen. This emission limitation shall apply during “on-going” operations, except during transient hours. During transient hours, a limitation of 10.0 ppmvd corrected to 15 percent oxygen shall apply on a three-hour average calculated as the average of the transient hour, the clock hour immediately prior to and the clock hour immediately following the transient hour. **When the unit is operating, the ammonia concentration (ammonia slip) measured in the exhaust stack, shall not exceed 5.0 ppmvd corrected to 15 percent oxygen, except during periods of startup, low load, or tuning.**~~

Verification: ~~The project owner shall submit to the District and the CPM turbine initial source test data and annual source test data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7). “On-going” operations are defined in AQ-30, and a “transient hour” is defined in AQ-31.~~

AQ-SC12 [Deleted (date of adoption) per staff analysis of Petition to Amend (SDGE 2016a)]

~~Until the California Global Warming Solutions Act of 2006 (AB32) is implemented, the project owner shall either participate in a greenhouse gas (GHG) registry approved by the CPM, or report on an annual basis to the~~

~~CPM the quantity of greenhouse gases emitted as a result of facility electricity production.~~

~~The project owner shall maintain a record of fuel types and carbon content used on-site for the purpose of power production. These fuels shall include but are not limited to each fuel type burned: (1) all fuel burned in internal combustion engines; (2) fuel used in fuel gas heaters and emergency equipment; and (3) all fuels used in any capacity for the purpose of facility startup, shutdown, operation, or emission controls.~~

~~The project owner may perform annual source tests of CO₂ and CH₄ emissions from the exhaust stacks while firing the facility's primary fuel, using the following test methods or other test methods as approved by the CPM. The project owner shall produce fuel-based emission factors in units of lbs. of CO₂ equivalent per mmBtu of fuel burned from the annual source tests. If a secondary fuel is approved for the facility, the project owner may also perform these source tests while firing the secondary fuel.~~

| Pollutant | Test Method |
|-----------------|--|
| CO ₂ | EPA Method 3A |
| CH ₄ | EPA Method 18 (precursor organic compound (POC) measured as CH ₄) |

~~Or, as an alternative to performing annual source tests, the project owner may use the Intergovernmental Panel on Climate Change (IPCC) Methodologies for Estimating Greenhouse Gas Emissions (MEGGE). If MEGGE is chosen, the project owner shall calculate the CO₂, CH₄ and N₂O emissions using the appropriate fuel-based carbon content coefficient (for CO₂) and the appropriate fuel-based emission factors (for CH₄ and N₂O).~~

~~The project owner shall convert the N₂O and CH₄ emissions into CO₂ equivalent emissions using the current IPCC Global Warming Potentials (GWP). The project owner shall maintain a record of all SF₆ that is used for replenishing on-site high voltage equipment. At the end of each reporting period, the project owner shall total the mass of SF₆ used and convert that to a CO₂ equivalent emission using the IPCC GWP for SF₆. The project owner shall maintain a record of all perfluorocarbons (PFC) and hydrofluorocarbons (HFC) used for replenishing on-site refrigeration and chillers directly related to electricity production. At the end of each reporting period, the project owner shall total the mass of PFCs and HFCs used and convert that mass to a CO₂ equivalent emission using the IPCC GWP.~~

~~On an annual basis, the project owner shall report the CO₂ and CO₂ equivalent emissions from the described emissions of CO₂, N₂O, CH₄, SF₆, PFCs, and HFCs.~~

Verification: ~~— The project's annual greenhouse gas emissions shall be reported, as a CO₂ equivalent, by the project owner to a climate action registry approved by the CPM, or to the CPM as part of the fourth quarterly operation report (AQ-SC7) or the annual air quality report, until such time that GHG reporting requirements are adopted and in force for the project as part of the California Global Warming Solutions Act of 2006.~~

AQ-SC13 Testing and maintenance of the emergency engine shall be performed between the hours of 10:00 am and 3:00 pm.

Verification: ~~The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission. The project owner shall provide records of dates and times of performed testing and maintenance. See Verification for condition AQ-56 for reporting requirements.~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

Conditions of certification AQ-1 through AQ-55 and AQ-67 through AQ-83 apply to each of the Power Station Units No. 1 and No. 2

~~**AQ-2 AQ-1**~~ ~~The project~~ **This** equipment shall be properly maintained and kept in good operating condition at all times.

Verification: ~~The project owner shall certify that the equipment has been maintained and kept in good operating as part of the Quarterly Operational Report (AQ-SC7). The project owner shall make the site available for inspection by representatives of the District, CARB, and the Energy Commission.~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~**AQ-8 AQ-2**~~ This equipment shall be fired on natural gas only. The sulfur content of the natural gas used shall not exceed 0.75 grains per 100 standard cubic feet of natural gas. The project owner shall maintain quarterly records of fuel content (grains of sulfur compounds per 100 scf of natural gas) and higher heating value (BTU/scf) and shall make these records available to District personnel upon request. Specifications, including sulfur content and higher heating value, of all natural gas, other than Public Utility Commission-regulated natural gas, shall be submitted to the District for written approval prior to use. **The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The project owner shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request.**

Verification: ~~The project owner shall compile continuous fuel sulfur content and higher heating value monitoring data from the gas supplier, or if such data is not~~

available, the project owner shall test the sulfur content and higher heating value of the natural gas fuel monthly using recognized ASTM method(s). The fuel sulfur content data shall be submitted to the CPM in the Quarterly Operational Report (AQ-SC7). ~~The project owner shall make the fuel sulfur content data available for inspection by representatives of the District, ARB, and the Energy Commission. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-53~~ **AQ-3** Pursuant to 40 CFR 72.30(b)(2)(ii) of the Federal Acid Rain Program, the project owner shall submit an application for a Title IV Operating Permit at least 24 months prior to the initial startup of this equipment. The project owner shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO₂ allowances.

Verification: The project owner shall provide copies of the Title IV Operating Permit application to the District and the CPM at least 24 months prior to the initial startup of the turbines. ~~The project owner shall submit to the CPM a certification that the applicable provisions of 40 CFR 73 have been met and the project owner maintains the information necessary to demonstrate compliance with this condition. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-67~~ **AQ-4** For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein.

Verification: The project owner shall submit to the District and CPM the test reports and RATA results to verify the emission results were recorded in accordance with this condition.

~~AQ-34~~ **AQ-5** When the unit is combusting fuel (operating), the concentration of emissions of oxides of nitrogen (NO_x) from each gas turbine/heat recovery steam generator train, **calculated as nitrogen dioxide (NO₂) and** as measured at in the exhaust stack exit, calculated as nitrogen dioxide, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen, **except during periods of startup, shutdown, low load operation, or tuning.** In determining compliance with this emission limitation, ~~t~~The following averaging periods shall apply to CEMS data:

- A.** ~~a~~-During any clock hour when duct firing above 19.5 MMBTU/hr heat input is occurring (a "duct-fired hour"): three-clock hour average, calculated as the average of the duct fired hour, the clock hour

immediately prior to and the clock hour immediately following the duct-fired hour.

B. ~~During~~ For any clock hour when ~~during which~~ the **change in gross electrical output produced by the combustion turbine exceeds 50 MW per minute for one minute or longer** difference between the maximum MW produced by the generator train and the minimum MW produced by the generator train exceeds + 25 MW (a “transient hour”): three-**clock** hour average, calculated as the average of the transient hour, the clock hour immediately prior to and the clock hour immediately following the transient hour.

C. ~~All other hours: one-clock-hour average.~~

~~Compliance with this limit shall be based on CEMS data for each unit averaged over each averaging period, or portions thereof, as applicable, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified through **the source test under condition AQ-16** an initial source test and at least annual source testing thereafter.~~

Verification: ~~The project owner shall submit to the District and the CPM turbine initial source test data, CEMS emissions data, and annual source test data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~**AQ-32 AQ-6** When the unit is operating, the concentration~~ The emissions of carbon monoxide (CO) **measured in the exhaust stack** from each turbine shall not exceed 4.0 parts per million by volume (three-hour rolling average) on a dry basis (ppmvd) corrected to 15 percent oxygen, **except during periods of startup, shutdown, low load operation, or tuning. A 3-clock hour averaging period shall apply to CEMS data.** ~~Compliance with these limits shall be based on CEMS data for each unit and averaged over each rolling three-hour period or portion thereof, excluding time when the equipment is operated under startup or shutdown conditions and time that the equipment is not in operation. Compliance with this limit shall also be verified through **the source test under condition AQ-16** an initial emission source test and at least annual source testing thereafter.~~

Verification: ~~The project owner shall submit to the District and the CPM turbine initial source test data, CEMS emissions data, and annual source test data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and**

data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-33~~ **AQ-7** ~~When the unit is operating, the~~ The emissions of volatile organic compounds (VOC) **concentration** from each turbine, calculated as methane **and measured in the exhaust stack**, shall not exceed 2.0 parts per million by volume (three-hour average) on a dry basis (ppmvd) corrected to 15 percent oxygen, **except during periods of startup, shutdown, low load operation, or tuning. For purposes of determining compliance based on the CEMS,** Compliance with this limit shall be based on District-approved source testing, the District-approved **VOC/CO CO/VOC** surrogate relationship, and on the CO CEMS data for each unit, and a 3-clock hour average shall be used in accordance with the CEMS protocol. averaged over each rolling three-hour period or portion thereof, when using CO CEMS data, excluding time when the equipment is operated under startup or shutdown conditions and time the equipment is not in operation. The **VOC/CO CO/VOC** surrogate relationship shall be verified and/or modified, if necessary, based on initial emissions source tests and at least annual source testing thereafter.

Verification: ~~The project owner shall submit to the District and the CPM turbine initial source test data, CEMS emissions data, annual source test data, and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-SC14~~ **AQ-8** When the unit is operating, the ammonia concentration (ammonia slip) measured in the exhaust stack, shall not exceed 5.0 ppmvd corrected to 15 percent oxygen, except during periods of startup, low load, or tuning.

Verification: ~~The project owner shall submit to the District and the CPM turbine initial source test data and annual source test data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7). “On-going” operations are defined in AQ-30, and a “transient hour” is defined in AQ-31.~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-20~~ **AQ-9** ~~To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution Control District Hearing Board, when operating with post-combustion air pollution control equipment, emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine shall not exceed 11.8 parts per million by volume on a dry basis (ppmvd) calculated over each one-hour averaging period and corrected to 15 percent oxygen, excluding~~

~~shutdowns, and extended and regular startups.~~ When the unit is operating, the concentration of Oxides of Nitrogen (NO_x), calculated as nitrogen dioxide (NO₂) and measured in the exhaust stack, shall not exceed 11.8 ppmvd corrected to 15 percent oxygen, averaged over each clock hour period, except for exempt periods of operation during startup, combined-cycle gas turbine extended startup, shutdowns, and low load operation, as defined in Rule 69.3.1. All CEMS calculations and averages shall be performed in accordance with the CEMS protocol approved by the District.

~~Verification: The project owner shall submit to the CPM and the District turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-68~~ AQ-10 When the unit is operating, the concentration of Oxides of Nitrogen (NO_x), calculated as Nitrogen Dioxide (NO₂) and measured in the exhaust stack, shall not exceed 42 ppmvd corrected to 15 percent oxygen, calculated over each clock hour period except for periods of Startup or Shutdown, as defined in Rule 69.3. All CEMS calculations, averages shall be performed in accordance with the CEMS protocol approved by the District.

~~Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and maintain information necessary to demonstrate compliance with this condition. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-42~~ AQ-11 The emissions of particulate matter less than 10 microns (PM₁₀) shall not exceed 14.0 lbs/hr for each turbine with and without duct burner firing. Compliance with this limit shall be based on an initial emissions source test and at least annual source testing thereafter.

~~Verification: The project owner shall provide to the District and the CPM the PM₁₀ source test results, as required by AQ-43 and AQ-45~~ AQ-4732, to demonstrate compliance with this condition.

~~AQ-69~~ AQ-12 The discharge of particulate matter from the exhaust stack of the unit shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm). The District may require periodic testing to verify compliance with this standard.

~~Verification: Upon request of the District, the project owner shall conduct a source test for particulate matter and submit the results as part of the Quarterly~~

~~Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-70~~ **AQ-13** Visible emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20 percent opacity for more than three (3) minutes in any period of 60 consecutive minutes.

~~Verification: The project owner shall submit to the District and the CPM certification of compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-36~~ **AQ-14** When operating without ~~with~~ the duct burner ~~at or below 19.5 MMBTU/hr heat input~~, the ~~mass~~ emissions from each ~~unit~~ turbine shall not exceed the following emission limits, except during ~~periods of~~ startup, or shutdown, ~~low load operation, or tuning.~~ conditions, as determined by the CEMS and/or District approved emissions source testing. Compliance with the NO_x limit shall be based on each rolling one-hour averaging period or portion thereof, and compliance with CO and VOC limits shall be based on each rolling three-hour averaging period or portion thereof. A 3 clock-hour averaging period for these limits shall apply to CEMS data except for NO_x emissions during non-transient hours when a 1 clock-hour averaging period shall apply.

| Pollutant | Emission Limit, lbs/hr |
|--|------------------------|
| <u>A)</u> Oxides of Nitrogen, NO _x (calculated as NO ₂) | 13.4 |
| <u>B)</u> Carbon Monoxide, CO | 16.3 |
| <u>C)</u> Volatile Organic Compounds, VOC | 4.0 |

~~Verification: The project owner shall submit to the District and the CPM turbine CEMS emissions data and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-37~~ **AQ-15** When operating with the duct burner ~~firing above 19.5 MMBTU/hr heat input~~, the ~~mass~~ emissions from each ~~unit~~ turbine shall not exceed the following emission limits, except during ~~periods of~~ startup, or shutdown, ~~low load operation, or tuning.~~ conditions, as determined by the Continuous Emissions Monitoring System (CEMS) and continuous monitors and / or District approved emissions source testing. Compliance with the NO_x, CO, and VOC limits shall be based on each rolling three-hour averaging period. A 3-clock-hour averaging period shall apply to CEMS data.

| Pollutant | Emission Limit, lbs/hr |
|--|------------------------|
| <u>A)</u> Oxides of Nitrogen, NO _x (calculated as NO ₂) | 14.9 |
| <u>B)</u> Carbon Monoxide, CO | 18.1 |
| <u>C)</u> Volatile Organic Compounds, VOC | 7.3 |

Verification: ~~The project owner shall submit to the District and the CPM turbine CEMS emissions data and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~**AQ-24**~~ **AQ-16** During shutdowns, and extended and regular startups, when operating with post-combustion air pollution control equipment, the total emissions from both turbines combined shall not exceed 200 pounds per hour of oxides of nitrogen (NO_x), calculated as nitrogen dioxide and measured over each clock hour period. Additionally, when operating with post-combustion air pollution control equipment, the total emissions when only one turbine is in operation shall not exceed 100 pounds per hour of NO_x, calculated as nitrogen dioxide and measured over each clock hour period. ~~(To comply with District Rule 20.3 (d)(2)(I)).~~ **Total combined NO_x emissions from both units shall not exceed 400 pounds per hour, calculated as Nitrogen Dioxide and measured over each 1-clock-hour period. These emission limits shall apply during all times during which one or both units are operating, including, but not limited to, emissions during periods of startup, shutdown, low load operation and tuning. In addition, Unit No. 1 shall not begin operating while Unit No. 2 is already operating in a startup period nor shall Unit No. 2 begin operating while Unit No. 1 is already operating in a startup period unless the unit already operating in a startup period meets all of the following in the clock-minute immediately preceding the clock-minute that the other unit begins operating:**

- A) Has been operating with a gross electrical output from the combustion turbine of 64 MW or more during the preceding 10 consecutive-clock-minute period;**
- B) The concentration of NO_x, calculated as NO₂ and measured in the exhaust stack, does not exceed 2.0 ppmvd corrected to 15 percent oxygen; and**
- C) The concentration of CO measured in the exhaust stack does not exceed 4.0 ppmvd corrected to 15 percent oxygen. (Rule 20.3(d)(2)(i))**

Verification: ~~The project owner shall submit to the CPM and the District turbine GEMS startup and shutdown emissions data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-22~~ **AQ-17** During extended startup and shutdown, when operating with post-combustion air pollution control equipment, the total emissions from both turbines combined shall not exceed 3,384 pounds per hour of carbon monoxide (CO), averaged over a one-hour averaging period. Additionally, when operating with post-combustion air pollution control equipment, the total emissions when one turbine is in operation shall not exceed 1,692 pounds per hour of CO over a one-hour averaging period. (To comply with District Rule 20.3 (d)(2)(i)). **Total combined CO emissions from both units shall not exceed 2,000 pounds per hour measured over each 1-clock-hour period. This emission limit shall apply during all times that one or both units are operating, including, but not limited to emissions during periods of startup, shutdown, low load operation and tuning.**

Verification: ~~The project owner shall submit to the CPM and the District turbine GEMS startup and shutdown emissions data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-17~~ **AQ-18** The ~~t~~**Total aggregate emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1(d)(1) as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for 104.3 tons for in** each rolling 12-calendar-month period. Upon surrender of sufficient emission offsets in compliance with District Rules 20.1 and 20.3, the total aggregate NOx limit shall increase up to 124.4 tons for each rolling 12-calendar month period. These additional emission offsets must have been publicly noticed through the emission reduction credit banking process or District notification specific for this project, and in a California Energy Commission notification specific for this project.

| <u>Pollutant</u> | <u>Emission Limit, tons per year</u> |
|---|---|
| <u>a. Oxides of Nitrogen, NOx (calculated as NO₂)</u> | <u>99</u> |
| <u>b. Carbon Monoxide, CO</u> | <u>99</u> |
| <u>c. Volatile Organic Compounds, VOC</u> | <u>49</u> |
| <u>d. PM10</u> | <u>99</u> |

The total aggregate emissions of NO_x each pollutant shall include emissions during all times that the equipment is operating, including but not limited to, emissions during periods of startup, shutdown, low load operation and tuning. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District.

Aggregate emissions shall begin accruing at the initial startup of either turbine. Compliance with the aggregate NO_x limit shall be verified using the GEMS on each gas turbine as well as U.S. EPA or CARB-certified NO_x emission factors, testing results, or other representative emissions information for all other combustion equipment.

Verification: ~~The project owner shall submit to the CPM and the District turbine emissions CEMS data and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~**AQ-18 AQ-19** The total aggregate emissions of Volatile Organic Compounds (VOC) from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1(d)(1), shall not exceed 50 tons for in each rolling 12 calendar month period. The VOC emissions shall begin accruing at the initial startup of either turbine. The total aggregate emissions of VOC shall include emissions during all times that the equipment is operating, including but not limited to, emissions during periods of startup, shutdown, low load operation and tuning. Compliance with this limit shall be based on District approved source testing and the District approved CO/VOC surrogate relationship.~~

The owner or operator shall obtain written authorization from the District prior to making any changes to the annual emission calculation protocol. Any approved changes to the protocol shall take effect no earlier than 30 days after requesting approval of the modified protocol unless an alternative is stated in writing by the District.

Verification: ~~The project owner shall submit to the CPM and the District turbine emissions CEMS data and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~**AQ-19 AQ-20** The project owner shall maintain records, on at least on a calendar monthly quarterly basis, of total aggregate mass emissions of NO_x and VOC, in tons per rolling 12 calendar month period, from all stationary emission~~

~~units at this stationary source, equipment, excluding permit exempt equipment, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1(d)(1), at this stationary source for the previous for each rolling 12 calendar month period. These records shall be maintained on site for a minimum of five years and made available to the District upon request. for inspection within 30 calendar days after the end of each calendar quarter.~~

For each calendar month and each rolling 12-calendar-month period, the project owner shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar-month period of NO_x (calculated as NO₂), CO, VOC (calculated as methane), PM₁₀, and SO_x (calculated as SO₂), in tons, from each emission unit located at this stationary source, except for emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 30 calendar days after the end of each calendar month.

Verification: ~~The project owner shall make the site available for inspection of the NO_x and VOC emissions records by representatives of the District, CARB, and the Energy Commission.~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-48~~ AQ-21 The emissions of any single ~~f~~Federal ~~h~~Hazardous ~~a~~Air ~~p~~Pollutant (**HAP**) shall not equal or exceed 10 tons, and the aggregate emissions of all ~~f~~Federal hazardous air pollutants, **HAPs** shall not equal or exceed 25 tons in any rolling 12-calendar month period. If emissions exceed these limits, the project owner shall apply to amend these limits and conduct a permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) analysis standards and requirements in accordance with applicable federal U.S. EPA regulations provisions (including timing requirements) of 40 CFR Part 63. Compliance with this limit these single and aggregate HAP limits shall be based on District approved VOC/TAC and CO/VOC surrogate relationships and the result of District approved source testing a methodology approved by the District for the purpose of calculating HAP emissions for this permit.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall provide hazardous air pollutant emissions calculations as required by the District using the District/CPM approved CO/VOC and VOC/TAC surrogate relationships a methodology approved by the District for the purpose of calculating HAP emissions for this permit demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7). If emissions exceed the limits specified in this condition the project

owner shall apply to amend these limits and conduct a this permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) analysis standards and requirements in accordance with applicable federal U.S. EPA regulations provisions (including timing requirements) of 40 CFR Part 63. The project owner shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-35~~ AQ-22 The maximum total dissolved solids (TDS) concentration of the reclaimed water to be used in the cooling towers shall not exceed 4,000 mg/l. This concentration shall be verified through quarterly testing of the reclaimed water by a certified lab using EPA approved methods.

Verification: ~~The project owner shall submit to the District and the CPM the quarterly cooling tower total dissolved solids test results demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-74~~ AQ-23 When combusting fuel, Ammonia shall be injected at all times that the SCR outlet temperature is 510 degrees Fahrenheit or greater.

Verification: ~~The project owner shall submit to the District and the CPM certification of compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-72~~ AQ-24 The Ammonia injection flow rate shall be continuously measured, recorded and controlled. The Ammonia injection flow control equipment shall be installed, calibrated and maintained in accordance with a District approved protocol.

Verification: ~~The project owner shall make the ammonia records available for inspection by representatives of the District, ARB, and the Energy Commission upon request.~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-25 Within 120 days or 300 hours of gas turbine operation, whichever comes first, after initial startup of each turbine, the project owner shall install post-combustion air pollution control equipment to minimize emissions from this equipment. Once installed, the post-combustion air pollution control equipment shall be maintained in good condition and, with the exception of periods during startup and shutdown, shall be in full operation at all times when the turbine is in stable operation. Except during periods when the

Ammonia injection system is being tuned or one or more Ammonia injection systems is in manual control (for compliance with applicable permits), the automatic Ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when Ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request.

Verification: ~~The project owner shall provide the CPM and the District operating data showing compliance with this condition as part of the Commissioning Status Report (AQ-28). The project owner shall make the site ~~motor information~~ available for inspection of the post-combustion air pollution control equipment and the CEMS records by representatives of the District, CARB, and the Energy Commission.~~ **The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

AQ-73-AQ-26 ~~The concentration of Ammonia solution used in the Ammonia injection system shall be less than 20 percent ammonia by weight. Records of Ammonia solution concentration shall be maintained on site and made available to District personnel upon request.~~

Verification: ~~The project owner shall make the ammonia records available for inspection by representatives of the District, ARB, and the Energy Commission upon request. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

AQ-41-AQ-27 ~~Shutdown is defined as the period beginning with the lowering of the output of a gas turbine below 50 percent of its base capacity and below the minimum operating conditions for the air pollution control equipment, and ending when combustion has ceased. For purposes of determining compliance with the emission limits of this permit, a shutdown period is the period of time that begins with the lowering of the gross electrical output of the combustion turbine below 64 MW and that ends five minutes after fuel flow to the combustion turbine ceases, not to exceed 65 consecutive minutes.~~

Verification: ~~The project owner shall submit to the District and the CPM shutdown frequency and duration data as part of the Quarterly Operational Report (AQ-SC7). The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

AQ-39-AQ-28 ~~Extended startup shall be defined as the time necessary to reach minimum operating conditions for the air pollution control equipment and to meet the emission limits specified in Conditions AQ-31 and AQ-32, not to~~

exceed four hours, after initial firing of the turbine following a shutdown period of greater than or equal to 48 hours. A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. For purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 120 consecutive minutes if the steam turbine reheat bowl temperature is above 500° F when the startup period begins and shall not exceed 360 consecutive minutes if the steam turbine reheat bowl temperature is less than or equal to 500° F when the startup period begins.

Verification: ~~The project owner shall submit to the District and the CPM extended startup frequency and duration data as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-74~~ AQ-29 Low load operation is a period of time that begins when the gross electrical output (load) of the combustion turbine is reduced below 64 MW from a higher load and that ends 10 consecutive minutes after the combustion turbine load next exceeds 64 MW provided that fuel is continuously combusted during the entire period and one or more clock hour concentration emission limits specified in this permit are exceeded as a result of the low-load operation. Periods of operation at low load shall not exceed 130 minutes in any calendar day nor an aggregate of 780 minutes in any calendar year, and no period of operation at low load shall begin during a startup period.

Verification: ~~The project owner shall submit to the District and the CPM certification of compliance with this condition as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-75~~ AQ-30 Tuning is defined as adjustments to the combustion system that involves operating the unit in a manner such that the emissions control equipment may not be fully effective or operational. Only one combustion turbine will be tuned at any given time. Tuning events shall not exceed 480 minutes in a calendar day nor exceed 40 hours in a calendar year. The District compliance division shall be notified at least 24 hours in advance of any tuning event.

Verification: ~~The project owner shall submit to the District and the CPM tuning events and duration data as part of the Quarterly Operational Report (AQ-SC7).~~ The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-76~~ **AQ-31** A CEMS Protocol is a document approved in writing by the APCD M&TS division that describes the Quality Assurance and Quality Control procedures for monitoring, calculating and recording stack emissions from the unit.

Verification: The project owner shall make the CEMS approval available for inspection by representatives of the District, ARB, and the Energy Commission upon request.

~~AQ-47~~ **AQ-32** ~~This equipment shall be source tested on at least an annual basis to show continued compliance with all applicable emissions limits, unless otherwise directed in writing by the District. An annual CEMS Relative Accuracy Test Audit (RATA), where required, may be used to fulfill the annual source testing requirement for NOx and CO. If the testing will be performed by someone other than the District, a source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the same requirements as listed in Condition AQ-43. Within 60 days after completion of testing, a final test report shall be submitted to the District for review and approval.~~ **This unit shall be source tested to demonstrate compliance with the NOx, CO, VOC, PM10, and Ammonia emission standards of this permit, using District approved methods. The source test and the NOx and CO Relative Accuracy Test Audit (RATA) tests shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, appendix B, sections 2.3.1 and 2.3.3.**

Verification: ~~The project owner shall, if the annual compliance source test is not conducted by the District, submit certified annual compliance source test and/or CEMS RATA results no later than 60 days following the annual source test and/or CEMS RATA date to both the District and CPM for approval.~~ **Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the CPM and District for review and approval.** If the source test is conducted by the District the project owner shall provide a copy of the source test results to the CPM for review within 15 days of their receipt from the District.

~~AQ-16~~ **AQ-33** ~~No later than 90 days after each unit commences commercial operation (defined for this condition as the instance when power is sold to the grid), a A Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B performance Specifications and Test Procedures. At least ~~60~~ **30** days prior to the test date, the project owner shall submit a test protocol to the District for written approval. Additionally, the District shall be notified a minimum of ~~45~~ **21** days prior to the test so that observers may be present. ~~Within 30-45 days of completion of this test, a written test report shall be submitted to the District for approval.~~~~

Verification: The project owner shall notify the CPM of the submittal of the RATA test protocol and the RATA test report within 15 days of its submittal to the District. The project owner shall notify the CPM and the District of the RATA test date at least ~~45~~²¹ days prior to the conducting the RATA test. The project owner shall provide the CPM documentation of the District approval of the RATA test protocol and RATA test report within 15 days of its receipt.

~~AQ-77~~ AQ-34 **If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. The source test protocol shall comply with the following requirements:**

- A. Measurements of NO_x, CO, and O₂ emissions shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District Source Test, method 100, or alternative methods approved by the District and EPA.**
- B. Measurement of VOC emissions shall be conducted in accordance with EPA Methods 25A and/or 18, or alternative methods approved by the District and EPA.**
- C. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District and EPA.**
- D. Measurements of PM₁₀ emissions shall be conducted in accordance with EPA Methods 201A and 202 or alternative methods approved by the district and EPA.**
- E. Source testing shall be performed with both the combustion turbine and the duct burner in operation. Each duct burner shall operate with a minimum heat input of 97 MMBTU/hr.**
- F. Source testing shall be performed at the most frequently used load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1.d, provided it is not less than 80 percent of the unit's rated load unless it is demonstrated to the satisfaction of the district that the unit cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.**
- G. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA.**

H. Measurements of opacity shall be conducted in accordance with EPA Method 9 or an alternative method approved by the District and EPA.

I. Measurement of fuel flow shall be conducted in accordance with an approved test protocol.

Verification: ~~If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. The project owner shall notify the CPM of the submittal of the source test protocol required under this condition within 15 days of its submittal to the District. The project owner shall provide the CPM documentation of the District approval of the source test protocol required under this condition within 15 days of its receipt. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-78 AQ-35~~ Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval.

Verification: ~~The project owner shall submit to the District and the CPM source test data or RATA within 45 days after completion of the renewal source test or RATA.~~

~~AQ-13 AQ-36~~ All CEMS shall be certified, calibrated, maintained, and operated for the monitoring of NO_x and CO The Oxides of Nitrogen (NO_x) and Oxygen (O₂) CEMs shall be certified and maintained in accordance with the applicable federal regulations including the requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75, and a ~~the CEMS CEMs~~ protocol approved by the District. The project owner shall submit a CEMS operating protocol to the District for written approval. The Carbon Monoxide (CO) CEMs shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

Verification: ~~At least 60 days prior to the operation of the permanent CEMS, the project owner shall submit a CEMS operating protocol to the District for written approval. The project owner shall provide the CPM documentation of the District's written approval of the CEMS operating protocol, within 15 days of its receipt. The project owner shall make the site available for inspection of the CEMS and CEMS maintenance records by representatives of the District, CARB, and the Energy Commission. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-9 AQ-37~~ A Continuous Emission Monitoring System (CEMS) shall be installed and calibrated to measure and record the concentration of NO_x, CO, and O₂ in the exhaust gas on a dry basis (ppmvd). Upon initial startup, a properly installed and calibrated CEMS shall thereafter be in full operation at all times when the turbine is in operation. If needed prior to installation and approval of the permanent CEMS, a portable CEMS which has been properly calibrated, may be used to continuously measure and record these parameters. Within 90 days after the commencement of commercial operations (as defined by 40 CFR 72.2), the CEMS shall be certified.

~~Protocol:~~ Initial startup shall be defined as the time when fuel is first fired in the equipment and shall not include the purging of foreign material from inside of the steam paths and from the outside of the tubes also known as steam blow/boilout. Commercial operation is defined for this condition as the instance when power is sold to the grid.

Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:

- A. Hourly average concentration of Oxides of Nitrogen (NO_x) corrected to 15 percent oxygen, in parts per million (ppmvd);**
- B. Concentration of Carbon Monoxide (CO) corrected to 15 percent oxygen, in parts per million (ppmvd);**
- C. Percent oxygen (O₂) in the exhaust gas (%) for each clock hour period;**
- D. Average concentration of Oxides of Nitrogen (NO_x) for each rolling 3-hour period, in parts per million (ppmv) corrected to 15 percent oxygen;**
- E. Hourly and Monthly mass emissions of Oxides of Nitrogen (NO_x), in pounds;**
- F. Rolling 12 month mass emissions of Oxides of Nitrogen (NO_x), in tons;**
- G. Hourly and monthly mass emissions of Carbon Monoxide (CO), in pounds;**
- H. Annual mass emissions of Carbon Monoxide (CO), in tons.**
- I. Natural gas flow rate to combustion turbine in scf/hr.**
- J. Natural gas flow rate to duct burner in scf/hr.**

K. Concentration of Volatile Organic Compounds (VOC) corrected to 15 percent oxygen, in parts per million (ppmvd) for each rolling 3-hour period, based upon the approved VOC/CO surrogate relationship.

L. Hourly and monthly mass emissions of VOC in pounds

M. Rolling 12-month mass emissions of VOC in tons.

The CEMS shall be in operation in accordance with the District approved CEMS monitoring protocol at all times when the combustion turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall provide the information necessary for compliance with this condition in the permanent CEMS protocol required under Condition ~~AQ-4336~~.

~~AQ-79~~ AQ-38 When the CEMs is not recording data and the unit is operating, hourly NOx emissions annual calculations shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMs during the most recent hours in which the unit operated 3 continuous hours at no less than 80 percent of full power rating. Alternate CO emission factors shall be determined from compliance source test emissions data. The alternate hourly CO emission rate shall be reviewed and approved by the District, in writing.

~~Verification: The project owner shall verify that the emission data provided in the Quarterly Operational Report (AQ-SC7) is calculated as specified above and the project owner shall make the CEMS emission data available for inspection by representatives of the District, ARB, and the Energy Commission upon request. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-80~~ AQ-39 Any violation of any emission standard as indicated by the CEMs shall be reported to the District's Compliance Division within 96 hours after such occurrence.

~~Verification: The project owner shall submit to the District and the CPM certification of compliance with this condition as part of the Quarterly Operational Report (AQ-SC7). The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-SC7~~ **AQ-40** The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 sections (d), (e), (f)(2), (f)(3), (f)(4) and (f)(5) and CEMs protocol approved by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-14~~ **AQ-41** The District shall be notified in writing **at least two weeks** prior to any proposed changes to be made in any Continuous Emission Monitor (CEMS) software which **that** affect the value of data displayed on the CEM monitors and recorded for reporting with respect to the parameters measured by their respective sensing devices **measurement, calculation or correction of data displayed and/or recorded by the CEMS.**

Verification: The project owner shall provide the District and the CPM copies of any proposed CEMS software change correspondence at least two weeks prior to any proposed changes.

~~AQ-12~~ **AQ-42** Prior to initial startup, each turbine shall be equipped with continuous monitors to measure or calculate and record the following operational characteristics of each unit:

- natural gas flow rate (scfh);
- natural gas flow rate to duct burners (scfh);
- heat input rate (MMBtu /hr);
- exhaust gas flow rate (dscfm);
- exhaust gas temperature (°F); and
- power output (gross MW).

Protocol: The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. This protocol, which shall include calculation methodology, shall be submitted to the District for written approval. The monitors shall be in full operation at all times when the turbine is in operation.

Fuel flowmeters with an accuracy of +/- 2 percent shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, and Section 2.1.6.

Verification: At least 60 days prior to the initial startup of the gas turbines, the project owner shall submit a turbine operation monitoring protocol to the District for written approval. The project owner shall provide the CPM documentation of the District's written approval of this protocol, within 15 days of its receipt. The project

~~owner shall make the site meter information available for inspection of the turbine operation monitors and monitor maintenance records by representatives of the District, CARB, and the Energy Commission. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~**AQ-29 AQ-43** Before operating an SCR system, continuous monitors shall be installed on each SCR system to monitor or calculate, and record the following:~~

- ~~• ammonia injection rate (lbs/hr)~~
- ~~• SCR catalyst temperature (°F)~~

~~Protocol: The monitors shall be installed, calibrated, and maintained in accordance with an approved protocol. This protocol, which shall include the calculation methodology, shall be submitted to the District for written approval at least 60 days prior to initial startup of the gas turbines with the SCR system. The monitors shall be in full operation at all times when the turbine is in operation.~~

~~**The unit shall be equipped with continuous monitors to measure, calculate and record the following operational characteristics:**~~

- ~~**A. Ammonia injection rate in lb/hr of solution.**~~
- ~~**B. Outlet temperature of SCR in degrees Fahrenheit.**~~
- ~~**C. Combustion turbine power output (MW).**~~
- ~~**D. Steam turbine reheat bowl temperature in degrees Fahrenheit.**~~

~~**The monitors shall be installed, calibrated, and maintained in accordance with a protocol approved by the District, which shall include any relevant calculation methodologies. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request.**~~

~~**Verification:** The project owner shall submit the proposed protocol for the SCR system continuous monitors, at least 60 days prior to initial startup of the gas turbines with the SCR system, to the District and CPM for approval. The project owner shall make the site available for inspection of the SCR system continuous monitors and monitoring records by representatives of the District, CARB, and the Energy Commission. ~~**The project owner shall submit to the CPM and the District turbine CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operational Report (AQ-SC7). The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-**~~~~

SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-81~~ **AQ-44** Operating logs or Data Acquisition System (DAS) records shall be maintained to record the beginning and end times and durations of all startups, shutdowns, low load operations, and tuning periods to the nearest minute; quantity of fuel used (in each clock hour, calendar month, and 12 calendar month period) in standard cubic feet; hours of daily operation; and total cumulative hours of operation during each calendar year.

Verification: ~~The project owner shall make the DAS records available for inspection by representatives of the District, ARB, and the Energy Commission. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-52~~ **AQ-45** All records required by this written permit Conditions ~~AQ-1~~ through ~~AQ-55~~ shall be maintained on site for a minimum of five years and made available to the District upon request.

Verification: ~~The project owner shall make all necessary records available for inspection by representatives of the District, CARB, and the Energy Commission upon request. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

~~AQ-3~~ **AQ-46** The project owner shall provide a Access, facilities, utilities, and any necessary safety equipment for source testing and inspection **shall be provided** upon request of the Air Pollution Control District.

Verification: The project owner shall make the site available for inspection by representatives of the District, CARB, and the Energy Commission. ~~The project owner shall provide a Access, facilities, utilities and any necessary safety equipment for source testing available and inspection shall be provided upon request to representatives of the District.~~

~~AQ-46~~ **AQ-47** The District may require toxic air contaminant emissions one or more of the following compounds, or additional compounds to be quantified through source testing periodically as needed to ensure compliance with Rule 1200-;

A) Acetaldehyde

B) Acrolein

C) Benzene

D) Formaldehyde

E) Toluene

F) Xylenes

If the District requires the project owner to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date, and the project owner shall submit a source test protocol to the District for written approval at least 30 days prior to the testing date.

Verification: ~~If the District requires the project owner to perform source testing,~~ The project owner shall submit the proposed protocol for the source tests ~~60~~ 30 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 45 days prior to the proposed source test date and time. The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-82~~ AQ-48 ~~The~~ This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: ~~The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission.~~ None required.

~~AQ-83~~ AQ-49 The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: ~~If the District requires the project owner to provide information, the project owner shall submit the required information to both the District and CPM for approval. The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.~~

AQ-50 The conditions stated in this authorization shall take effect upon completion of construction of the modified equipment as described in applications APCD2015-APP-003970 and APCD2015-APP-003971. Any conditions referring to hour, day, month, year, clock hour, calendar day, calendar month or calendar year shall apply to the entire duration of that period if the equipment is operated for any portion of the corresponding period under this authorization. This condition does not

relieve the owner or operator from complying with any other applicable conditions of other permits or authorizations.

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

AQ-51 Prior to operating the modified emission unit, the project owner shall submit an initial certification of compliance, to the District and EPA, for the modified emission unit, in accordance with Rule 1414(f)(3)(ix), and 40 CFR 70.5(c)(9), that includes the identification of each applicable term or condition of the final permit for which the compliance status is being certified, the current compliance status and whether the modified equipment was in continuous or intermittent compliance during the certification period, identification of the applicable permitted method used to determine compliance during the certification period, and any other information required by the District to determine the compliance status. This requirement may be fulfilled by submitting District form 1401-I along with the construction completion notice. The modified equipment shall not be operated until written authorization is received from the District in accordance with Rule 1410(b)(2) or the project owner has submitted an application for an administrative amendment in accordance with Rule 1410(q)(6).

Verification: The project owner shall provide copies of all related correspondence with the District within 15 days of submittal/receipt to the CPM for review.

AQ-52 Not later than 60 calendar days after completion of construction for each combustion turbine, an Initial Emissions Source Test shall be conducted on that turbine to demonstrate compliance with the NO_x, CO, VOC, PM₁₀, and ammonia emission standards of this permit. The source test shall be conducted according to an approved protocol if testing is not performed by the District and the protocol shall comply with all applicable requirements dictated in this permit for routine source tests and/or RATAs. The protocol shall be submitted to the District for approval at least 60 days prior to the proposed test date.

Verification: The project owner shall submit to the CPM for review and the District for approval the source test protocol at least 60 days prior to the proposed test date.

AQ-53 After completion of construction, the NO_x and O₂ CEMs described in this permit shall be recertified according to the timelines and applicable requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMs protocol approved by the District. The

Carbon Monoxide (CO) CEMs shall be recertified in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

Verification: The project owner shall demonstrate compliance with this condition and provide copies of all CEMs recertification documents within 15 days of submittal/receipt to the CPM for review.

AQ-54 After completion of construction, a Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present.

Verification: The project owner shall submit to the CPM for review and the District for approval a test protocol at least 30 days prior to the proposed test date. The project owner shall also notify the CPM and District of the test date at least 21 days prior to conducting the RATA and other certification tests.

AQ-55 At least 30 days prior to completion of construction of this equipment, the owner or operator shall submit a protocol to the District for approval to be used in calculating emissions to show compliance with all annual (ton/yr) emission limits of this permit. The protocol must contain the following information/meet the following requirements:

- a. The protocol must provide procedures for calculating annual emissions of NO_x, CO, VOC and PM₁₀.
- b. NO_x and CO emissions from the combustion turbine shall be calculated using CEMS data during all periods CEMS data is valid. For all other times the protocol must specify data substitution procedures or other calculation methodology.
- c. During all times except periods of startup, shutdown, low load operation and tuning, VOC and PM₁₀ emissions from the combustion turbine shall be calculated using measured fuel flow and/or operating time and the results of the most recent District witnessed source tests. The protocol shall specify procedures for calculating emissions during all other times for these pollutants.
- d. Total emissions from the combustion turbines shall include the sum of all emissions during all periods of operation.
- e. The protocol shall also specify procedures for calculating annual emissions from emission units located at this source, other than the combustion turbines, if they are subject to the annual emission limit included in this permit. These emissions shall be added to the totals

for the combustion turbines to determine emissions from the stationary source.

f. For any parameter used in calculating emissions that is measured in more than one location (e.g. fuel flow) or using more than one monitoring protocol or procedure, an indication of which monitoring location, protocol or procedure will be used for this calculation.

g. Averaging times or other aggregation procedures for CEMS data if different than those specified in the applicable CEMS protocol.

h. For any instance where the CEMS protocol provides for correcting raw CEMS data prior to reporting, an indication of whether corrected or uncorrected data will be used for the calculation.

Verification: The project owner shall submit to the CPM for review and the District for approval a protocol to be used in calculating emissions to show compliance with all annual emission limits at least 30 days prior to completion of construction of this equipment.

Emergency Engine Generator: Cummins engine, Model QSK60G

Conditions of Certification AQ-SC13 and AQ-~~EEG156~~ through AQ-~~EEG1466~~ apply to the Emergency Engine Generator

AQ-EEG1 The engine shall be operated exclusively during emergencies as defined in Rule 69.4.1 or Rule 12 or 17 CCR 93115 as applicable, or for maintenance and testing.

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG2 This engine shall not be used as a part of a non-emergency Demand Response Program (DRP). This condition shall not apply to engines operating pursuant to the rolling blackout reduction program as defined in 17 CCR 93115.4(a)(65).

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

~~AQ-56~~ AQ-EEG3 This internal combustion engine shall not exceed 52 hours of operation per calendar year for non-emergency purposes (testing and maintenance).

Verification: ~~The project owner shall submit records required by Conditions **AQ-SC13, AQ-59, AQ-60, and AQ-62** and by this condition demonstrating compliance in the fourth quarter, Quarterly Operational Reports as required by condition **AQ-SC7**. The project owner shall submit a photograph of the engine hour meter as part of the compliance report. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-59~~ **AQ-EEG4 Gaseous fuel engines shall use only gaseous fuel which contains no more than 10 grains of sulfur compounds, calculated as hydrogen sulfide, per 100 cubic feet of dry gaseous fuel at standard conditions. Gaseous fuels include natural gas, propane, liquefied petroleum gas (LPG), butane. Gasoline engines shall use only California reformulated gasoline.**

Verification: ~~The project owner shall make the site available for inspection of equipment and fuel purchase records by representatives of the District, ARB, and the Energy Commission. The owner shall report fuel specifications and quantity used annually. See Verification for Condition **AQ-56** for reporting requirements.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-58~~ **AQ-EEG5 Visible emissions including crank case smoke shall comply with **Air Pollution Control District** Rule 50. (Rule 50)**

Verification: ~~See verification for Condition **AQ-57**~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-57~~ **AQ-EEG6 At no time shall the subject ~~The~~ equipment **described above shall not** cause or contribute to a public nuisance, ~~as specified in District (Rule 51).~~**

Verification: ~~The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-60~~ **AQ-EEG7 A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine ~~operating~~ **operation** hours. If a meter is replaced, the ~~a~~ **Air** ~~o~~ **Pollution** ~~e~~ **Control** ~~d~~ **District's** ~~e~~ **Compliance** ~~d~~ **Division** shall be notified in writing within 10**

calendar days. The written notification shall include the following information:

- A. Old meter's hour reading~~ₓ~~.
- B. Replacement meter's manufacturer name, model~~ₓ~~, and serial number if available and current hour reading on replacement meter~~ₓ~~, **and**
- C. Copy of receipt of new meter or **of** installation work order.

~~D~~—A copy of the meter replacement notification shall be maintained on-site and made available to the Air Pollution Control District upon request. (**Rule 12**, Rule 69.4.1, **40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ**)

Verification: ~~The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission. See Verification for condition **AQ-56** for reporting requirements. **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**~~

~~**AQ-61 AQ-EEG8**~~ The owner or operator of this engine shall, **at their discretion**, **either:**

a) operate and maintain a certified ~~conduct periodic maintenance of the engine and add on~~ **any control device equipment, if any, as recommended by the engine and control equipment according to the manufacturer's emission-related written instructions, or**

b) operate and maintain the engine in a manner consistent with good air pollution control practice for minimizing emissions, ~~as specified by the engine servicing company's maintenance procedures.~~

The periodic maintenance shall be conducted at least once each calendar year. (**40 CFR 60 Subpart JJJJ, or Rule 12, or** Rule 69.4.1)

Verification: ~~See verification for Condition **AQ-57**. **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**~~

~~**AQ-64 AQ-EEG9**~~ The owner or operator of the engine shall maintain the following records on site for at least the same period of time as the engine to which the records apply is located at the site:

- ~~A. Applicable fuel certification.~~

~~B. Manual of recommended maintenance provided by the manufacturer, or other maintenance procedures specified by the engine servicing company as approved in writing by the Air Pollution Control Officer on site for at least the same period of time as the engine is located at the site.~~

~~C. Records of the annual engine maintenance including date the maintenance was performed.~~

~~These records.~~ **This manual** shall be made available to the Air Pollution Control District upon request. (**Rule 12**, Rule 69.4.1, **40 CFR 60 Subpart JJJJ**, **40 CFR 63 Subpart ZZZZ**)

Verification: See verification for Condition **AQ-57**. **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-62~~ **AQ-EEG10** The owner or operator of this engine shall maintain a **monthly** operating log containing, at a minimum, the following:

(a) dates and times of engine operation; ~~indicating whether the operation was for~~ **maintenance and testing** ~~non-emergency purposes or during an emergency situation~~ **use**; and the nature of the emergency, if **known** available ~~(these records are not required if the total engine operations for any purpose, including emergency situation, do not exceed 52 hours in a calendar year); total cumulative hours of operation per calendar year, based on actual readings of engine hour meter;~~

(b) records of periodic **engine** maintenance **shall** including **the** dates **and a description of the** maintenance **that** was performed; **and**

(c) hours of operation for all uses other than those specified above and identification of the nature of that use.

Verification: ~~The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission. See Verification for condition AQ-56 for reporting requirements.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

~~AQ-63~~ **AQ-EEG11** All operational and maintenance logs ~~records~~ required by this permit shall be kept **maintained on site and readily available for District inspection for** a minimum of ~~3 years~~ **36 months from their date of creation** unless otherwise indicated by the conditions of this permit ~~and these records shall be made available to the Air Pollution Control District upon request.~~

Verification: ~~See verification for Condition AQ-57.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

AQ-EEG12 Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

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

~~AQ-66~~ **AQ-EEG13** This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: ~~See verification for Condition AQ-57.~~ **None required.**

~~AQ-65~~ **AQ-EEG14** The ~~permittee~~ **project owner** shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics “Hot Spots” Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: ~~See verification for Condition AQ-57.~~ **The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (AQ-SC7) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.**

The following conditions are no longer needed and all are removed as follows:

~~AQ-1~~ **[Replaced by AQ-52]**

~~The project owner shall operate the project in accordance with all data and specifications submitted with the application under which this license is issued unless otherwise noted below.~~

~~**Verification:** The project owner shall either certify compliance with this condition or provide documentation regarding the upsets or operation compliance violations that occurred as part of the Quarterly Operational Report (AQ-SC7). The project owner shall make the site available for inspection by representatives of the District, CARB and the Energy Commission.~~

~~AQ-4~~ **[Deleted (date of adoption)]**

~~The project owner shall obtain any necessary District permits and Energy Commission approval for all ancillary combustion equipment including emergency engines, prior to on-site delivery of the equipment.~~

~~**Verification:** The project owner shall submit to the District and the CPM any necessary permit applications for ancillary combustion equipment prior to the onsite delivery of the equipment.~~

~~**AQ-5** **[Deleted (date of adoption)]**~~

~~The exhaust stacks for each turbine power station shall be at least 110 feet in height above site base elevation.~~

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

~~**AQ-6** **[Deleted (date of adoption)]**~~

~~The project owner shall submit to the District the final selection, design parameters and details of the selective catalytic reduction (SCR) and oxidation catalyst emission control systems. Such information may be submitted to the District as trade secret and confidential pursuant to District Rules 175 and 176.~~

~~**Verification:** The project owner shall submit SCR and oxidation catalyst design details to the District and the CPM at least 90 days prior to commencement of construction.~~

~~**AQ-7** The exhaust stacks for each turbine shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with District Method 3A, Figure 2, and approved by the District.~~

~~**Verification:** Prior to construction of the turbine stacks the project owner shall provide to the District and CPM for approval detailed plan drawings of the turbine stacks that show the sampling ports and demonstrate compliance with the requirements of this condition. The project owner shall make the site available for inspection of the turbine stacks by representatives of the District, CARB, and the Energy Commission.~~

~~**AQ-10** **[Deleted (date of adoption)]**~~

~~At least 60 days prior to initial startup of the gas turbines, the project owner shall submit a protocol to the District, for written approval, that shows how the permanent CEMS will be able to meet all District monitoring requirements and measure NOx emissions at a level of 2.0 ppmv.~~

~~**Verification:** The project owner shall provide the information necessary for compliance with this condition in the permanent CEMS protocol required under Condition **AQ-13**.~~

~~**AQ-11** **[Deleted (date of adoption)]**~~

~~The project owner shall submit a protocol to the District for approval which shall specify a method of determining the CO/VOC surrogate relationship that shall be used to demonstrate compliance with all VOC emission limits.~~

~~**Verification:** The project owner shall submit the CO/VOC surrogate determination protocol to the CPM and District at least 60 days prior to initial startup of the turbine. This protocol can be provided as part of the Source Testing Protocol required by condition **AQ-43**.~~

~~**AQ-15** A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to U.S. EPA Region 9 and the District at least 45 **30** days prior to the Relative Accuracy Test Audit test, as required in 40 CFR 75.62.~~

~~**Verification:** The project owner shall notify the CPM of the submittal of the monitoring plan required under this condition within 15 days of its submittal to the District. The project owner shall provide the CPM documentation of the District approval of the monitoring plan required under this condition within 15 days of its receipt.~~

Commissioning Period Conditions

~~**AQ-23** **[Deleted (date of adoption)]**~~

~~Beginning at initial startup of each turbine, a "Commissioning Period" for each turbine shall commence. This Commissioning Period shall end 120 days after initial startup or immediately after written acceptance of clear custody and control of the equipment is turned over to the project owner, or after not more than 300 hours of gas turbine operation whichever comes first. During the Commissioning Period, only the emission limits specified in Conditions Nos. **AQ-17, 18, 19, 20, 21, 24, 25, 26** and **27** shall apply.~~

~~**Verification:** The project owner shall submit to the CPM and the District turbine operating data demonstrating compliance with this condition as part of the Commissioning Status Report (**AQ-28**).~~

~~**AQ-24** **[Replaced by AQ-21]**~~

~~During the Commissioning Period when operating without any post-combustion air pollution control equipment, the total emissions from both turbines combined shall not exceed 900 pounds per hour of oxides of nitrogen (NO_x), calculated as nitrogen dioxide and measured over each clock hour period. Additionally, when operating without any post-combustion air pollution control equipment, the total emissions when only one turbine is in operation shall not exceed 450 pounds per hour of NO_x, calculated as nitrogen dioxide and measured over each clock hour period. These emission limits shall apply during commissioning, shutdowns, transients, and extended and regular startups to comply with District Rule 20.3(d)(2)(i).~~

~~**Verification:** The project owner shall submit to the CPM and the District turbine GEMS emissions data demonstrating compliance with this condition as part of the Commissioning Status Report (**AQ-28**). A "transient hour" is defined in **AQ-31**.~~

~~**AQ-26** **[Replaced by AQ-22]**~~

~~During the Commissioning Period when operating without any post-combustion air pollution control equipment, the total emissions from both turbines combined shall not exceed 4,000 pounds per hour of carbon monoxide (CO), measured over each clock hour period. Additionally, when operating without any post-combustion air pollution control equipment, the total emissions when one turbine is in operation shall not exceed 2,000 pounds per hour of CO measured over each clock hour period. These~~

emission limits shall apply during commissioning, shutdowns, transients, and extended and regular startups to comply with District Rule 20.3(d)(2)(i).

Verification:—The project owner shall submit to the CPM and the District turbine CEMS emissions data demonstrating compliance with this condition as part of the Commissioning Status Report (~~AQ-28~~). A “transient hour” is defined in ~~AQ-31~~.

~~**AQ-27**~~ ~~**[Replaced by AQ-20]**~~

~~To ensure compliance with District Rule 69.3.1 and except during any period of time for which a variance from Rule 69.3.1 has been granted by the Air Pollution District Hearing Board, when operating without any post combustion air pollution control equipment, the emissions of oxides of nitrogen (NO_x), calculated as nitrogen dioxide, from each turbine shall not exceed 19.6 parts per million by volume on a dry basis (ppmvd) calculated over each one-hour averaging period and corrected to 15 percent oxygen, excluding shutdowns, regular and extended startups.~~

Verification:—The project owner shall submit to the CPM and the District turbine CEMS emissions data demonstrating compliance with this condition as part of the Commissioning Status Report (~~AQ-28~~).

~~**AQ-28**~~ ~~**[Deleted (date of adoption)]**~~

~~After the end of the Commissioning Period for each turbine, the project owner shall submit a written progress report to the District. This report shall include, at minimum, the date the Commissioning period ended, the periods of startup, the emission of NO_x and CO during startup, and the emissions of NO_x and CO during steady state operation with and without duct burner firing. NO_x and CO emissions shall be reported in both ppmv at 15 percent O₂ and lbs/hr. This report shall also detail any turbine or emission control equipment malfunction, upset, repairs, maintenance, modifications, or replacements affecting emissions of air contaminants that occurred during the Commissioning Period.~~

Verification:—The project owner shall submit to the District and the CPM, within 30 days after the end of the Commissioning Period for each turbine, a Commissioning Status Report that demonstrates compliance with this condition and the emissions limits and other requirements of Conditions ~~AQ-23~~ through ~~AQ-27~~ and ~~AQ-29~~.

Conditions for On-Going Operations

~~**AQ-30**~~ ~~**[Deleted (date of adoption)]**~~

~~For the purpose of the Determination of Compliance and Authority to Construct, the period described as “on-going” operations of the turbines shall commence immediately following the end of the Commissioning Period. Condition Nos. ~~AQ-17, 18, 19, 20, 21, 24, 26, and 27~~ shall continue to apply during on-going operations.~~

Verification:— The project owner shall certify that compliance with the conditions for “on-going” operations commenced immediately following the end of the Commissioning Period with the first Quarterly Operational Report (**AQ-SC7**) following the Commissioning Status Report (**AQ-28**).

AQ-34— Replaced by **AQ-SC11 (CEC 2003)**.

Verification:— See **AQ-SC11**.

AQ-38— This maximum combined fuel input into the duct burners shall not exceed 780,000 MMBtu per rolling 12 calendar month period. The project owner shall maintain a log that contains, at a minimum, the dates, times, and duct burner fuel consumption when one or both turbines are operated with the duct burners in operation. These logs shall be maintained on site for a minimum of five years and made available to District personnel upon request.

Verification:— The project owner shall submit to the District and the CPM duct burner fuel consumption data demonstrating compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**).

AQ-40— **[Replaced by AQ-39]**

Regular startup shall be defined as the time necessary to reach minimum operating conditions for the air pollution control equipment and to meet the emission limits specified in Conditions **AQ-31** and **AQ-32**, not to exceed two hours in duration, after initial firing of the turbine following a shutdown period of less than 48 hours.

Verification:— The project owner shall submit to the District and the CPM startup frequency and duration data as part of the Quarterly Operational Report (**AQ-SC7**).

AQ-43— **[Deleted (date of adoption)]**

Within 30 days after completion of the Commissioning Period, an initial emissions source test shall be conducted by an independent, CARB approved tester at the project owner’s expense to show compliance with all applicable emission limits. A source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test protocol shall comply with the following requirements:

- a) Measurement of oxides of nitrogen (NO_x), carbon monoxide (CO), and stack gas oxygen shall be conducted in accordance with the San Diego Air Pollution Control District Method 100, or equivalent, as approved by the District Air Pollution Control Officer.
- b) Measurements of particulate matter less than 10 microns shall be conducted in accordance with the U.S. Environmental Protection Agency (U.S. EPA) Methods 201A and 202 or equivalent, as approved by the District Air Pollution Control Officer.

- ~~e) Measurements of volatile organic compounds (VOC) shall be conducted in accordance with San Diego Air Pollution Control District Methods 25A and /or 18, or equivalent, as approved by the District Air Pollution Control Officer.~~
- ~~d) Measurement of ammonia shall be conducted in accordance with BAAQMD ST-1B, or equivalent, as approved by the District Air Pollution Control Officer.~~
- ~~e) Source testing shall be performed at no less than 80 percent of the maximum fired capacity for the combined-cycle system.~~

~~**Verification:**—The project owner shall submit the proposed protocol for the source tests 60 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 45 days prior to the proposed source test date and time.~~

~~**AQ-44** **[Deleted (date of adoption)]**~~

~~Within 30 days after completion of the Commissioning Period, an initial emissions source test shall be conducted by an independent, CARB approved tester at the project owner's expense to determine the emissions of toxic air contaminants (TAC). A source test protocol shall be submitted to the District for written approval at least 60 days prior to source testing. The source test will not include testing of the cooling towers. At a minimum the following compounds shall be tested for and emissions, if any, quantified:~~

- ~~• Acetaldehyde~~
- ~~• Acrolein~~
- ~~• Benzene~~
- ~~• Formaldehyde~~
- ~~• Toluene~~
- ~~• Xylenes~~

~~Protocol: This list of compounds may be adjusted by the District based on source test results to ensure compliance with District Rule 1200 is demonstrated. The District may require one or more or additional compounds to be quantified through source testing as needed to ensure compliance with Rule 1200.~~

~~**Verification:**—The project owner shall submit the proposed protocol for the source tests 60 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall notify the District and CPM no later than 45 days prior to the proposed source test date and time.~~

~~**AQ-45** **[Deleted (date of adoption)]**~~

~~A final source test report shall be submitted to the District and the CPM for review and approval. The testing contractor shall include, as part of the test report, a certification that to the best of its knowledge the report is a true and accurate representation of the test conducted and the results.~~

~~**Verification:** The project owner shall submit certified initial source test results no later than 60 days following the initial source test date to both the District and CPM for approval.~~

~~**AQ-49** **[Deleted (date of adoption)]**~~

~~Prior to the initial startup of this equipment, the project owner shall surrender to the District Class A Emission Reduction Credits (ERCs) in an amount equivalent to 125.2 tons per year of NO_x to offset the maximum allowable of 104.3 tons per year of NO_x emissions for this facility. When additional offsets are available up to 149.3 tons per year, maximum allowable emissions will increase to the maximum potential of 124.4 tons per year of NO_x emissions.~~

~~The CPM may approve any such change to the ERC list contained in Air Quality Condition **AQ-SC5** based on the criteria provided in **AQ-SC5**.~~

~~**Verification:** The project owner shall surrender the required ERCs to the District and provide copies of all related correspondence within 15 days of submittal to the CPM for review and approval.~~

Additional General Conditions

~~**AQ-50** **[Replaced by AQ-9]**~~

~~For each emission limit expressed as pounds per hour or parts per million based on a one-hour averaging period, compliance shall be based on each rolling continuous one-hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions data.~~

~~**Verification:** The project owner shall verify that the emission data provided in the Quarterly Operational Report (**AQ-SC7**) is calculated as specified above and the project owner shall make the CEMS emission data available for inspection by representatives of the District, CARB, and the Energy Commission upon request.~~

~~**AQ-51** **[Replaced by AQ-9]**~~

~~For each emission limit expressed as pound per hour or parts per million based on a three-hour averaging period, compliance shall be based on each rolling continuous three-hour period using data collected at least once every 15 minutes when compliance is based on continuous emissions monitoring data.~~

~~**Verification:** The project owner shall verify that the emission data provided in the Quarterly Operational Report (**AQ-SC7**) is calculated as specified above and the project owner shall make the CEMS emission data available for inspection by representatives of the District, CARB, and the Energy Commission upon request.~~

~~**AQ-54** The project owner shall comply with the continuous emission monitoring requirements of 40 CFR Part 75.~~

~~**Verification:** The project owner shall provide the District and the CPM with the information necessary to demonstrate compliance with this condition in the permanent CEMS protocol (**AQ-13**) and as part of the Quarterly Operational Reports (**AQ-SC7**).~~

~~**AQ-55** **[Deleted (date of adoption)]**~~

~~The project owner shall submit an application to the District for a Federal (Title V) Operating Permit, in accordance with District Regulation XIV within 12 months after initial startup of this equipment.~~

~~**Verification:** The project owner shall provide copies of the Title V Operating Permit application to the District and the CPM within 12 months after initial startup of the turbines.~~

REFERENCES

- CEC 2003a - California Energy Commission. Final Staff Assessment, Palomar Power Project (01-AFC-24), January 2003.
- CEC 2003b – California Energy Commission. Final Commission Decision, Palomar Power Project (01-AFC-24), August 2003.
- CEC 2015 – California Energy Commission. Staff Analysis for Palomar Energy Center (PEC) to Amend Air Quality Conditions of Certification (TN 203772) dated March 5, 2015.
- SDAPCD 2016a – San Diego Air Pollution Control District. Engineering Evaluation Authority to Construct, SDG&E Palomar Energy Center, http://www.sdapcd.org/content/dam/sdc/apcd/notices/APCD_PEC_ATC_Evaluation.pdf, April 14, 2016.
- SDAPCD 2016b – San Diego Air Pollution Control District. Authority to Construct, SDG&E Palomar Energy Center, for Power Station Unit No.1 (TN 211984) and Power Station Unit No.2 (TN 211985), June 20, 2016.
- SDGE 2013a – San Diego Gas & Electric. Petition for Amendment to Upgrade the Advanced Gas Path Technology of the Combustion Turbines and to Conform Air Quality Conditions of Certification with Permit Conditions of the Revised Permit to Operate (TN 69634) dated February 22, 2013.
- SDGE 2013b – San Diego Gas & Electric. Petition to separate two amendments from SDG&E (TN 200539) docketed on September 20, 2013.
- SDGE 2015a – San Diego Gas & Electric. Palomar Energy Center Addendum to Air Quality Petition to Modify (TN 204166) dated April 14, 2015.
- SDGE 2015b – San Diego Gas & Electric. Palomar Energy Center Second Addendum to Petition to Amend Air Quality Conditions of Certification (TN 206895) dated December 1, 2015.
- SDGE 2016a – San Diego Gas & Electric. Palomar Energy Center Request to Recombine Petitions to Amend to: (1) Upgrade the Advanced Gas Path Technology of the Combustion Turbine; and (2) Conform Air Quality Conditions with the San Diego Air Pollution Control District's Permit to Operate (TN 210531) docketed on February 25, 2016.
- SDGE 2016b – San Diego Gas & Electric. Palomar Energy Center Request not to include in the California Energy Commission amendment analysis the San Diego Air Pollution Control District (SDAPCD) Condition 50 through 55 incorporated in the Authority to Construct (ATC) (TN 213840) dated June 21, 2016.

U.S. EPA 2016 - Environmental Protection Agency. AirData Database ambient air quality data. <http://www.epa.gov/airquality/airdata/>. Accessed 2016.

APPENDIX 1 – FINALIZED CONDITIONS OF CERTIFICATION IF APPROVED

AQ-SC1 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC2 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC3 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC4 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC5 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC6 The project owner shall submit to the CPM for review any significant modifications approved by the issuing agency to any project air permit.

Verification: The project owner shall submit any significant approved air permit modifications to the CPM within the most current Quarterly Operational Report (**AQ-SC7**).

AQ-SC7 The project owner shall submit Quarterly Operational Reports to the CPM and District that include operational and emissions information as necessary to demonstrate compliance with conditions **AQ-SC8**, **AQ-SC9**, **AQ-1** through **AQ-55**, and **AQ-EEG1** through **AQ-EEG14**, as applicable. The Quarterly Operational Report will specifically note or highlight instances of noncompliance as required by **AQ-39** and the corrective measures taken to correct these incidents.

Verification: The project owner shall submit the Quarterly Operational Reports to the CPM and the District no later than 30 days following the end of each calendar quarter as required by Rule 19.2 section (d).

AQ-SC8 The project owner shall provide a flow meter to determine the daily cooling tower circulating water flow and shall monitor and record the daily flow.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-SC9 The cooling tower annual PM10 emissions shall be limited to 5.7 ton/year. The project owner shall estimate annual PM10 emissions from the cooling tower using the water quality testing data and recirculating water flow data collected on a quarterly basis (**AQ-SC8** and **AQ-22**). The water quality testing data shall show the total dissolved solids, the pH, and the ammonia concentration of the cooling water.

The cooling tower shall be equipped with drift eliminators with an efficiency of 0.0005 percent.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-SC10 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC11 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC12 [Deleted per staff analysis of Petition to Amend (SDGE 2016a)]

AQ-SC13 Testing and maintenance of the emergency engine shall be performed between the hours of 10:00 am and 3:00 pm.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

Conditions of certification AQ-1 through AQ-55 apply to each of the Power Station Units No. 1 and No. 2

AQ-1 This equipment shall be properly maintained and kept in good operating condition at all times.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-2 The unit shall be fired on Public Utility Commission (PUC) quality natural gas only. The project owner shall maintain quarterly records of sulfur content (grains/100 dscf) and higher and lower heating values (Btu/dscf) of the natural gas and provide such records to the District personnel upon request.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-3 The project owner shall comply with all the applicable provisions of 40 CFR 73, including requirements to offset, hold and retire SO₂ allowances.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-4 For purposes of determining compliance based on source testing, the average of three subtests shall be used. For purposes of determining compliance with emission limits based on the CEMS, data collected in accordance with the CEMS protocol shall be used and averaging periods shall be as specified herein.

Verification: The project owner shall submit to the District and CPM the test reports and RATA results to verify the emission results were recorded in accordance with this condition.

AQ-5 When the unit is combusting fuel (operating), the concentration of oxides of nitrogen (NO_x), calculated as nitrogen dioxide (NO₂) and measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen, except during periods of startup, shutdown, low load operation, or tuning. The following averaging periods shall apply to CEMS data:

A. During any clock hour when duct firing above 19.5 MMBTU/hr heat input is occurring (a “duct-fired hour”): three-clock hour average, calculated as the average of the duct fired hour, the clock hour immediately prior to and the clock hour immediately following the duct-fired hour.

B. For any clock hour during which the change in gross electrical output produced by the combustion turbine exceeds 50 MW per minute for one minute or longer (transient hour): three-clock hour average, calculated as the average of the transient hour, the clock hour immediately prior to and the clock hour immediately following the transient hour.

C. All other hours: one-clock-hour average.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-6 When the unit is operating, the concentration of carbon monoxide (CO) measured in the exhaust stack shall not exceed 4.0 parts per million by volume (ppmvd) corrected to 15 percent oxygen, except during periods of startup, shutdown, low load operation, or tuning. A 3-clock hour averaging period shall apply to CEMS data.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-7 When the unit is operating, the VOC concentration, calculated as methane and measured in the exhaust stack, shall not exceed 2.0 parts per million by volume on a dry basis (ppmvd) corrected to 15 percent oxygen, except during periods of startup, shutdown, low load operation, or tuning. For purposes of determining compliance based on the CEMS, the District approved VOC/CO surrogate relationship, the CO CEMS data, and a 3-clock hour average shall be used in accordance with the CEMS protocol. The VOC/CO surrogate relationship shall be verified and/or modified, if necessary, based on source testing.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-8 When the unit is operating, the ammonia concentration (ammonia slip) measured in the exhaust stack, shall not exceed 5.0 ppmvd corrected to 15 percent oxygen, except during periods of startup, low load, or tuning.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-9 When the unit is operating, the concentration of Oxides of Nitrogen (NO_x), calculated as nitrogen dioxide (NO₂) and measured in the exhaust stack, shall not exceed 11.8 ppmvd corrected to 15 percent oxygen, averaged over each clock hour period, except for exempt periods of operation during startup, combined-cycle gas turbine extended startup, shutdowns, and low load operation, as defined in Rule 69.3.1. All CEMS calculations and averages shall be performed in accordance with the CEMS protocol approved by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-10 When the unit is operating, the concentration of Oxides of Nitrogen (NO_x), calculated as Nitrogen Dioxide (NO₂) and measured in the exhaust stack, shall not exceed 42 ppmvd corrected to 15 percent oxygen, calculated over each clock hour period except for periods of Startup or Shutdown, as defined in Rule 69.3. All CEMS calculations, averages shall be performed in accordance with the CEMS protocol approved by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-11 The emissions of particulate matter less than 10 microns (PM₁₀) shall not exceed 14.0 lbs/hr for each turbine with and without duct burner firing.

Verification: The project owner shall provide to the District and the CPM the PM₁₀ source test results, as required by **AQ-32**, to demonstrate compliance with this condition.

AQ-12 The discharge of particulate matter from the exhaust stack of the unit shall not exceed 0.10 grains per dry standard cubic foot (0.23 grams/dscm). The District may require periodic testing to verify compliance with this standard.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-13 Visible emissions from the lube oil vents and the exhaust stack of the unit shall not exceed 20 percent opacity for more than three (3) minutes in any period of 60 consecutive minutes.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-14 When operating with the duct burner at or below 19.5 MMBTU/hr heat input, mass emissions from each unit shall not exceed the following limits, except during periods of startup, shutdown, low load operation, or tuning. A 3 clock-hour averaging period for these limits shall apply to CEMS data except for NO_x emissions during non-transient hours when a 1 clock-hour averaging period shall apply.

| Pollutant | Emission Limit, lbs/hr |
|---|------------------------|
| A) Oxides of Nitrogen, NO _x (calculated as NO ₂) | 13.4 |
| B) Carbon Monoxide, CO | 16.3 |
| C) Volatile Organic Compounds, VOC | 4.0 |

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-15 When operating with the duct burner firing above 19.5 MMBTU/hr heat input, mass emissions from each unit shall not exceed the following emission limits, except during periods of startup, shutdown, low load operation, or tuning. A 3-clock-hour averaging period shall apply to CEMS data.

| Pollutant | Emission Limit, lbs/hr |
|---|------------------------|
| A) Oxides of Nitrogen, NO _x (calculated as NO ₂) | 14.9 |
| B) Carbon Monoxide, CO | 18.1 |
| C) Volatile Organic Compounds, VOC | 7.3 |

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-16 Total combined NO_x emissions from both units shall not exceed 400 pounds per hour, calculated as Nitrogen Dioxide and measured over each 1-clock-hour period. These emission limits shall apply during all times during which one or both units are operating, including, but not limited to, emissions during periods of startup, shutdown, low load operation and tuning. In addition, Unit No. 1 shall not begin operating while Unit No. 2 is already operating in a

startup period nor shall Unit No. 2 begin operating while Unit No. 1 is already operating in a startup period unless the unit already operating in a startup period meets all of the following in the clock-minute immediately preceding the clock-minute that the other unit begins operating:

- A) Has been operating with a gross electrical output from the combustion turbine of 64 MW or more during the preceding 10 consecutive-clock-minute period;
- B) The concentration of NO_x, calculated as NO₂ and measured in the exhaust stack, does not exceed 2.0 ppmvd corrected to 15 percent oxygen; and
- C) The concentration of CO measured in the exhaust stack does not exceed 4.0 ppmvd corrected to 15 percent oxygen. (Rule 20.3(d)(2)(i))

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-17 Total combined CO emissions from both units shall not exceed 2,000 pounds per hour measured over each 1-clock-hour period. This emission limit shall apply during all times that one or both units are operating, including, but not limited to emissions during periods of startup, shutdown, low load operation and tuning.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-18 Total emissions from all stationary emission units at this stationary source, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1(d)(1) as it exists on the date the permit to operate for this equipment is approved, shall not exceed the following limits for each rolling 12-calendar-month period:

| Pollutant | Emission Limit, tons per year |
|---|-------------------------------|
| a. Oxides of Nitrogen, NO _x (calculated as NO ₂) | 99 |
| b. Carbon Monoxide, CO | 99 |
| c. Volatile Organic Compounds, VOC | 49 |
| d. PM10 | 99 |

The aggregate emissions of each pollutant shall include emissions during all times that the equipment is operating. All calculations performed to show compliance with this limit shall be performed according to a protocol approved in advance by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-19 The owner or operator shall obtain written authorization from the District prior to making any changes to the annual emission calculation protocol. Any approved changes to the protocol shall take effect no earlier than 30 days after requesting approval of the modified protocol unless an alternative is stated in writing by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-20 For each calendar month and each rolling 12-calendar-month period, the project owner shall maintain records, as applicable, on a calendar monthly basis, of mass emissions during each calendar month and rolling 12-calendar-month period of NO_x (calculated as NO₂), CO, VOC (calculated as methane), PM₁₀, and SO_x (calculated as SO₂), in tons, from each emission unit located at this stationary source, except for emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d)(1) as it exists on the date the permit to operate for this equipment is approved. These records shall be made available for inspection within 30 calendar days after the end of each calendar month.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-21 The emissions of any single Federal Hazardous Air Pollutant (HAP) shall not equal or exceed 10 tons, and the aggregate emissions of all Federal HAPs shall not equal or exceed 25 tons in any rolling 12-calendar month period. If emissions exceed these limits, the project owner shall apply to amend permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. Compliance with these single and aggregate HAP limits shall be based on a methodology approved by the District for the purpose of calculating HAP emissions for this permit.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall provide hazardous air pollutant emissions calculations as required by the District using a methodology approved by the District for the purpose of calculating HAP emissions for this permit. If emissions exceed the limits specified in this condition the project owner shall apply to amend this permit to reflect applicable Federal Maximum Achievable Control Technology (MACT) standards and requirements in accordance with applicable provisions (including timing requirements) of 40 CFR Part 63. The project owner shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-22 The maximum total dissolved solids (TDS) concentration of the water used in the cooling towers shall not exceed 4,000 mg/l. This concentration shall be verified through quarterly testing of the water by a certified lab using EPA approved methods.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-23 When combusting fuel, Ammonia shall be injected at all times that the SCR outlet temperature is 510 degrees Fahrenheit or greater.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-24 The Ammonia injection flow rate shall be continuously measured, recorded and controlled. The Ammonia injection flow control equipment shall be installed, calibrated and maintained in accordance with a District approved protocol.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-25 Except during periods when the Ammonia injection system is being tuned or one or more Ammonia injection systems is in manual control (for compliance with applicable permits), the automatic Ammonia injection system serving the SCR shall be in operation in accordance with manufacturer's specifications at all times when Ammonia is being injected into the SCR. Manufacturer specifications shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-26 The concentration of Ammonia solution used in the Ammonia injection system shall be less than 20 percent ammonia by weight. Records of Ammonia solution concentration shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-27 For purposes of determining compliance with the emission limits of this permit, a shutdown period is the period of time that begins with the lowering of the gross electrical output of the combustion turbine below 64 MW and that ends five minutes after fuel flow to the combustion turbine ceases, not to exceed 65 consecutive minutes.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-28 A startup period is the period of time that begins when fuel flows to the combustion turbine following a non-operational period. For purposes of determining compliance with the emission limits of this permit, the duration of a startup period shall not exceed 120 consecutive minutes if the steam turbine reheat bowl temperature is above 500° F when the startup period begins and shall not exceed 360 consecutive minutes if the steam turbine reheat bowl temperature is less than or equal to 500° F when the startup period begins.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-29 Low load operation is a period of time that begins when the gross electrical output (load) of the combustion turbine is reduced below 64 MW from a higher load and that ends 10 consecutive minutes after the combustion turbine load next exceeds 64 MW provided that fuel is continuously combusted during the entire period and one or more clock hour concentration emission limits specified in this permit are exceeded as a result of the low-load operation. Periods of operation at low load shall not exceed 130 minutes in any calendar day nor an aggregate of 780 minutes in any calendar year, and no period of operation at low load shall begin during a startup period.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-30 Tuning is defined as adjustments to the combustion system that involves operating the unit in a manner such that the emissions control equipment may not be fully effective or operational. Only one combustion turbine will be tuned at any given time. Tuning events shall not exceed 480 minutes in a calendar day nor exceed 40 hours in a calendar year. The District compliance division shall be notified at least 24 hours in advance of any tuning event.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-31 A CEMS Protocol is a document approved in writing by the APCD M&TS division that describes the Quality Assurance and Quality Control procedures for monitoring, calculating and recording stack emissions from the unit.

Verification: The project owner shall make the CEMS approval available for inspection by representatives of the District, ARB, and the Energy Commission upon request.

AQ-32 This unit shall be source tested to demonstrate compliance with the NO_x, CO, VOC, PM₁₀, and Ammonia emission standards of this permit, using District approved methods. The source test and the NO_x and CO Relative Accuracy Test Audit (RATA) tests shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, appendix B, sections 2.3.1 and 2.3.3.

Verification: Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the CPM and District for review and approval. If the source test is conducted by the District the project owner shall provide a copy of the source test results to the CPM for review within 15 days of their receipt from the District.

AQ-33 A Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR Part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present.

Verification: The project owner shall notify the CPM of the submittal of the RATA test protocol and the RATA test report within 15 days of its submittal to the District. The project owner shall notify the CPM and the District of the RATA test date at least 21 days prior to the conducting the RATA test. The project owner shall provide the CPM documentation of the District approval of the RATA test protocol and RATA test report within 15 days of its receipt.

AQ-34 If source testing will be performed by an independent contractor and witnessed by the District, a source test protocol shall be submitted to the District for written approval at least 30 days prior to source testing. The source test protocol shall comply with the following requirements:

- A. Measurements of NO_x, CO, and O₂ emissions shall be conducted in accordance with U.S. Environmental Protection Agency (EPA) methods 7E, 10, and 3A, respectively, and District Source Test, method 100, or alternative methods approved by the District and EPA.
- B. Measurement of VOC emissions shall be conducted in accordance with EPA Methods 25A and/or 18, or alternative methods approved by the District and EPA.

- C. Measurements of ammonia emissions shall be conducted in accordance with Bay Area Air Quality Management District ST-1B or an alternative method approved by the District and EPA.
- D. Measurements of PM10 emissions shall be conducted in accordance with EPA Methods 201A and 202 or alternative methods approved by the district and EPA.
- E. Source testing shall be performed with both the combustion turbine and the duct burner in operation. Each duct burner shall operate with a minimum heat input of 97 MMBTU/hr.
- F. Source testing shall be performed at the most frequently used load level, as specified in 40 CFR Part 75 Appendix A Section 6.5.2.1.d, provided it is not less than 80 percent of the unit's rated load unless it is demonstrated to the satisfaction of the district that the unit cannot operate under these conditions. If the demonstration is accepted, then emissions source testing shall be performed at the highest achievable continuous level power level.
- G. Measurements of particulate matter emissions shall be conducted in accordance with SDAPCD Method 5 or an alternative method approved by the District and EPA.
- H. Measurements of opacity shall be conducted in accordance with EPA Method 9 or an alternative method approved by the District and EPA.
- I. Measurement of fuel flow shall be conducted in accordance with an approved test protocol.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-35 Within 45 days after completion of the renewal source test or RATA, a final test report shall be submitted to the District for review and approval.

Verification: The project owner shall submit to the District and the CPM source test data or RATA within 45 days after completion of the renewal source test or RATA.

AQ-36 The Oxides of Nitrogen (NO_x) and Oxygen (O₂) CEMs shall be certified and maintained in accordance with applicable federal regulations including the requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMs shall be certified and maintained in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

- AQ-37** Continuous emission monitoring system (CEMS) shall be installed and properly maintained and calibrated to measure, calculate and record the following, in accordance with the District approved CEMS protocol:
- A. Hourly average concentration of Oxides of Nitrogen (NO_x) corrected to 15 percent oxygen, in parts per million (ppmvd);
 - B. Concentration of Carbon Monoxide (CO) corrected to 15 percent oxygen, in parts per million (ppmvd);
 - C. Percent oxygen (O₂) in the exhaust gas (%) for each clock hour period;
 - D. Average concentration of Oxides of Nitrogen (NO_x) for each rolling 3-hour period, in parts per million (ppmv) corrected to 15 percent oxygen;
 - E. Hourly and Monthly mass emissions of Oxides of Nitrogen (NO_x), in pounds;
 - F. Rolling 12 month mass emissions of Oxides of Nitrogen (NO_x), in tons;
 - G. Hourly and monthly mass emissions of Carbon Monoxide (CO), in pounds;
 - H. Annual mass emissions of Carbon Monoxide (CO), in tons.
 - I. Natural gas flow rate to combustion turbine in scf/hr.
 - J. Natural gas flow rate to duct burner in scf/hr.
 - K. Concentration of Volatile Organic Compounds (VOC) corrected to 15 percent oxygen, in parts per million (ppmvd) for each rolling 3-hour period, based upon the approved VOC/CO surrogate relationship.
 - L. Hourly and monthly mass emissions of VOC in pounds
 - M. Rolling 12-month mass emissions of VOC in tons.

The CEMS shall be in operation in accordance with the District approved CEMS monitoring protocol at all times when the combustion turbine is in operation. A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request.

Verification: The project owner shall provide the information necessary for compliance with this condition in the permanent CEMS protocol required under Condition **AQ-36**.

AQ-38 When the CEMs is not recording data and the unit is operating, hourly NOx emissions annual calculations shall be determined in accordance with 40 CFR 75 Appendix C. Additionally, hourly CO emissions for the annual emission calculations shall be determined using the hourly emission rate recorded by the CEMs during the most recent hours in which the unit operated 3 continuous hours at no less than 80 percent of full power rating. Alternate CO emission factors shall be determined from compliance source test emissions data. The alternate hourly CO emission rate shall be reviewed and approved by the District, in writing.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-39 Any violation of any emission standard as indicated by the CEMs shall be reported to the District's Compliance Division within 96 hours after such occurrence.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-40 The CEMs shall be maintained and operated, and reports submitted, in accordance with the requirements of Rule 19.2 sections (d), (e), (f)(2), (f)(3), (f)(4) and (f)(5) and CEMs protocol approved by the District.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-41 The District shall be notified at least two weeks prior to any changes made in CEMS software that affect the measurement, calculation or correction of data displayed and/or recorded by the CEMS.

Verification: The project owner shall provide the District and the CPM copies of any proposed CEMS software change correspondence at least two weeks prior to any proposed changes.

AQ-42 Fuel flowmeters with an accuracy of +/- 2 percent shall be maintained to measure the volumetric flow rate corrected for temperature and pressure. Correction factors and constants shall be maintained on site and made available to the District upon request. The fuel flowmeters shall meet the applicable quality assurance requirements of 40 CFR Part 75, Appendix D, and Section 2.1.6.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-43 The unit shall be equipped with continuous monitors to measure, calculate and record the following operational characteristics:

- A. Ammonia injection rate in lb/hr of solution.
- B. Outlet temperature of SCR in degrees Fahrenheit.
- C. Combustion turbine power output (MW).
- D. Steam turbine reheat bowl temperature in degrees Fahrenheit.

The monitors shall be installed, calibrated, and maintained in accordance with a protocol approved by the District, which shall include any relevant calculation methodologies. The monitors shall be in full operation at all times when the combustion turbine is in operation. Calibration records for the continuous monitors shall be maintained on site and made available to the District upon request.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-44 Operating logs or Data Acquisition System (DAS) records shall be maintained to record the beginning and end times and durations of all startups, shutdowns, low load operations, and tuning periods to the nearest minute; quantity of fuel used (in each clock hour, calendar month, and 12 calendar month period) in standard cubic feet; hours of daily operation; and total cumulative hours of operation during each calendar year.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-45 All records required by this written permit shall be maintained on site for a minimum of five years and made available to the District upon request.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-46 Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

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

AQ-47 The District may require one or more of the following compounds, or additional compounds to be quantified through source testing periodically to ensure compliance with Rule 1200:

- A) Acetaldehyde
- B) Acrolein
- C) Benzene
- D) Formaldehyde
- E) Toluene
- F) Xylenes

If the District requires the project owner to perform this source testing, the District shall request the testing in writing a reasonable period of time prior to the testing date, and the project owner shall submit a source test protocol to the District for written approval at least 30 days prior to the testing date.

Verification: The project owner shall certify compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-48 This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: None required.

AQ-49 The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-50 The conditions stated in this authorization shall take effect upon completion of construction of the modified equipment as described in applications APCD2015-APP-003970 and APCD2015-APP-003971. Any conditions referring to hour, day, month, year, clock hour, calendar day, calendar month or calendar year shall apply to the entire duration of that period if the equipment is operated for any portion of the corresponding period under this authorization. This condition does not relieve the owner or operator from complying with any other applicable conditions of other permits or authorizations.

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

AQ-51 Prior to operating the modified emission unit, the project owner shall submit an initial certification of compliance, to the District and EPA, for the modified emission unit, in accordance with Rule 1414(f)(3)(ix), and 40 CFR 70.5(c)(9), that includes the identification of each applicable term or condition of the final permit for which the compliance status is being certified, the current compliance status and whether the modified equipment was in continuous or intermittent compliance during the certification period, identification of the applicable permitted method used to determine compliance during the certification period, and any other information required by the District to determine the compliance status. This requirement may be fulfilled by submitting District form 1401-I along with the construction completion notice. The modified equipment shall not be operated until written authorization is received from the District in accordance with Rule 1410(b)(2) or the project owner has submitted an application for an administrative amendment in accordance with Rule 1410(q)(6).

Verification: The project owner shall provide copies of all related correspondence with the District within 15 days of submittal/receipt to the CPM for review.

AQ-52 Not later than 60 calendar days after completion of construction for each combustion turbine, an Initial Emissions Source Test shall be conducted on that turbine to demonstrate compliance with the NO_x, CO, VOC, PM₁₀, and ammonia emission standards of this permit. The source test shall be conducted according to an approved protocol if testing is not performed by the District and the protocol shall comply with all applicable requirements dictated in this permit for routine source tests and/or RATAs. The protocol shall be submitted to the District for approval at least 60 days prior to the proposed test date.

Verification: The project owner shall submit to the CPM for review and the District for approval the source test protocol at least 60 days prior to the proposed test date.

AQ-53 After completion of construction, the NO_x and O₂ CEMs described in this permit shall be recertified according to the timelines and applicable requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75 and the CEMs protocol approved by the District. The Carbon Monoxide (CO) CEMs shall be recertified in accordance with 40 CFR 60, Appendices B and F, unless otherwise specified in this permit.

Verification: The project owner shall demonstrate compliance with this condition and provide copies of all CEMs recertification documents within 15 days of submittal/receipt to the CPM for review.

AQ-54 After completion of construction, a Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the CEMS in accordance with applicable provisions of 40 CFR part 75 Appendix A and B performance specifications. At least 30 days prior to the test date, the project owner shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 21 days prior to the test so that observers may be present.

Verification: The project owner shall submit to the CPM for review and the District for approval a test protocol at least 30 days prior to the proposed test date. The project owner shall also notify the CPM and District of the test date at least 21 days prior to conducting the RATA and other certification tests.

AQ-55 At least 30 days prior to completion of construction of this equipment, the owner or operator shall submit a protocol to the District for approval to be used in calculating emissions to show compliance with all annual (ton/yr) emission limits of this permit. The protocol must contain the following information/meet the following requirements:

- a. The protocol must provide procedures for calculating annual emissions of NO_x, CO, VOC and PM₁₀.
- b. NO_x and CO emissions from the combustion turbine shall be calculated using CEMS data during all periods CEMS data is valid. For all other times the protocol must specify data substitution procedures or other calculation methodology.
- c. During all times except periods of startup, shutdown, low load operation and tuning, VOC and PM₁₀ emissions from the combustion turbine shall be calculated using measured fuel flow and/or operating time and the results of the most recent District witnessed source tests. The protocol shall specify procedures for calculating emissions during all other times for these pollutants.
- d. Total emissions from the combustion turbines shall include the sum of all emissions during all periods of operation.
- e. The protocol shall also specify procedures for calculating annual emissions from emission units located at this source, other than the combustion turbines, if they are subject to the annual emission limit included in this permit. These emissions shall be added to the totals for the combustion turbines to determine emissions from the stationary source.
- f. For any parameter used in calculating emissions that is measured in more than one location (e.g. fuel flow) or using more than one monitoring protocol or procedure, an indication of which monitoring location, protocol or procedure will be used for this calculation.

- g. Averaging times or other aggregation procedures for CEMS data if different than those specified in the applicable CEMS protocol.
- h. For any instance where the CEMS protocol provides for correcting raw CEMS data prior to reporting, an indication of whether corrected or uncorrected data will be used for the calculation.

Verification: The project owner shall submit to the CPM for review and the District for approval a protocol to be used in calculating emissions to show compliance with all annual emission limits at least 30 days prior to completion of construction of this equipment.

Emergency Engine Generator: Cummins engine, Model QSK60G

Conditions of certification AQ-SC13 and AQ-EEG1 through AQ-EEG14 apply to the Emergency Engine Generator

AQ-EEG1 The engine shall be operated exclusively during emergencies as defined in Rule 69.4.1 or Rule 12 or 17 CCR 93115 as applicable, or for maintenance and testing.

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG2 This engine shall not be used as a part of a non-emergency Demand Response Program (DRP). This condition shall not apply to engines operating pursuant to the rolling blackout reduction program as defined in 17 CCR 93115.4(a)(65).

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG3 This internal combustion engine shall not exceed 52 hours of operation per calendar year for non-emergency purposes (testing and maintenance).

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG4 Gaseous fuel engines shall use only gaseous fuel which contains no more than 10 grains of sulfur compounds, calculated as hydrogen sulfide, per 100 cubic feet of dry gaseous fuel at standard conditions. Gaseous fuels include natural gas, propane, liquefied petroleum gas (LPG), butane. Gasoline engines shall use only California reformulated gasoline.

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG5 Visible emissions including crank case smoke shall comply with Air Pollution Control District Rule 50. (Rule 50)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG6 The equipment described above shall not cause or contribute to a public nuisance. (Rule 51)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG7 A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operation hours. If a meter is replaced, the Air Pollution Control District's Compliance Division shall be notified in writing within 10 calendar days. The written notification shall include the following information:

- A. Old meter's hour reading,
- B. Replacement meter's manufacturer name, model and serial number if available and current hour reading on replacement meter, and
- C. Copy of receipt of new meter or of installation work order.

A copy of the meter replacement notification shall be maintained onsite and made available to the Air Pollution Control District upon request. (Rule 12, Rule 69.4.1, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG8 The owner or operator of this engine shall, at their discretion, either:

- a) operate and maintain a certified engine and any control device according to the manufacturer's emission-related written instructions, or

- b) operate and maintain the engine in a manner consistent with good air pollution control practice for minimizing emissions.

The periodic maintenance shall be conducted at least once each calendar year. (40 CFR 60 Subpart JJJJ, or Rule 12, or Rule 69.4.1)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG9 The owner or operator of the engine shall maintain the manual of recommended maintenance provided by the manufacturer, or other maintenance procedure as approved in writing by the Air Pollution Control Officer on site for at least the same period of time as the engine is located at the site.

This manual shall be made available to the Air Pollution Control District upon request. (Rule 12, Rule 69.4.1, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subpart ZZZZ)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG10 The owner or operator of this engine shall maintain a monthly operating log containing, at a minimum, the following:

- (a) dates and times of engine operation; whether the operation was for maintenance and testing purposes or emergency use; and the nature of the emergency, if known;
- (b) records of periodic engine maintenance shall include the date and a description of the maintenance that was performed; and
- (c) hours of operation for all uses other than those specified above and identification of the nature of that use.

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG11 All records required by this permit shall be maintained on site and readily available for District inspection for a minimum of 36 months from their date of creation unless otherwise indicated by the conditions of this permit.

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.

AQ-EEG12 Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.

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

AQ-EEG13 This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.

Verification: None required.

AQ-EEG14 The project owner shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics “Hot Spots” Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

Verification: The project owner shall certify compliance with this condition as part of the Fourth Quarter Quarterly Operational Report (**AQ-SC7**) and shall make the site and data available for inspection by representatives of the District, ARB or Energy Commission.