DOCKETED	
Docket Number:	05-AFC-02C
Project Title:	The Walnut Creek Energy Park
TN #:	225872
Document Title:	Memo - Staff Analysis of Proposed Revisions to Conditions of Certification, Including Air Quality and Worker Safety
Description:	N/A
Filer:	Marichka Haws
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	11/9/2018 3:53:48 PM
Docketed Date:	11/9/2018

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

DATE: November 9, 2018

TO: Interested Parties

FROM: Eric Veerkamp, Compliance Project Manager

SUBJECT: **Walnut Creek Energy Park (05-AFC-2C)**
Staff Analysis of Proposed Revisions to Conditions of Certification, Including Air Quality and Worker Safety

On October 4, 2017, Walnut Creek Energy, LLC (WCE) submitted a Petition to Amend (PTA) to modify the Final Decision for the Walnut Creek Energy Park (WCEP) facility. WCE has requested California Energy Commission (Energy Commission) approval to change the air quality conditions of certification for consistency with the South Coast Air Quality Management District's (SCAQMD) Title V Permit, issued on September 28, 2017. WCE is requesting revisions to **AQ-4** for the ammonia emission limit, and revisions to **AQ-7** to add clarifying language pertaining to particulates. WCE is also requesting a change to Worker Safety-5 (**WS-5**) to remove outdated language related to training security guards in the use of emergency equipment.

WCEP was certified on February 27, 2008, and is a 500-megawatt, simple-cycle, gas-fired peaking power plant. The project commenced operation on May 1, 2013. WCEP is located at 911 Bixby Drive in the City of Industry in Los Angeles County, California.

Energy Commission staff reviewed the present PTA and assessed the impacts of this proposal on environmental quality and on public health and safety. Based on staff's analysis, staff proposes to reject the revisions to **AQ-4**, to change the ammonia emission limit from 5.0 parts per million volume (PPMV) to 5 PPMV; and to accept the proposed revisions to **AQ-7** to clarify that the operating load of 100 percent of PM10 emission tests also applies to PM2.5 emission tests. Staff is also proposing minor modifications to a number of other conditions of certification to incorporate South Coast Air Quality Management District condition language that changed as a result of new Title V requirements.

Staff also proposes to modify the language of **WS-5**, as requested in the petition, to remove specific language pertaining to training security guards how to use an automatic external defibrillator, because WCEP no longer employs security guards. It is staff's opinion that, with this action, the project would remain in compliance with applicable laws, ordinances, regulations, and standards (LORS), and the proposed changes to the project would not result in any significant adverse direct, indirect, or cumulative impacts to the environment (Cal. Code of Regs., tit.20, § 1769).

The amendment petition and Staff Analysis have been posted on the Energy Commission's WCEP webpage at: https://www.energy.ca.gov/sitingcases/walnutcreek/index.html. Energy Commission staff intends to recommend approval of the petition at the December 10, 2018, Business Meeting of the Energy Commission. After the Final Decision, the Energy Commission Order regarding this petition will also be posted on the Commission's WCEP webpage.

This notice is being provided to interested parties and property owners adjacent to the WCEP site. The notice and is being mailed to the WCEP mail list and sent electronically to the WCEP list serve.

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 PM on Monday, December 5, 2018. 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, and follow the instructions in the on-line form. Be sure to include the facility name in your comments.

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

California Energy Commission
Dockets Unit, MS-4
Docket No. 05-AFC-02C
1516 Ninth Street
Sacramento, CA 95814-5512

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

If you have questions about this notice, please contact Eric Veerkamp, Compliance Project Manager, at (916) 654-4295 or via e-mail at: eric.veerkamp@energy.ca.gov

For information on participating in the Energy Commission's review of the proposed modification to the WCEP, please contact the Energy Commission Public Adviser's Office at (800) 822-6228 (toll-free in California). The Public Adviser's Office can also be contacted via e-mail at: publicadviser@energy.ca.gov. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at: mediaoffice@energy.ca.gov

Mail List 7096
Walnut Creek Energy Park List Serve

WALNUT CREEK ENERGY PARK (05-AFC-2C)
Petition to Amend the Final Decision
EXECUTIVE SUMMARY
Eric Veerkamp

INTRODUCTION

On October 4, 2017, Walnut Creek Energy, LLC (WCE) (Petitioner), filed a Petition to Amend (PTA) the Final Decision for the Walnut Creek Energy Park (WCEP) project. The 500-megawatt project was certified by the California Energy Commission on February 27, 2008 and was on line and producing power on May 1, 2013. The facility is located at 911 Bixby Drive in the City of Industry, Los Angeles County.

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

Energy Commission staff has completed its review of all materials received. The Staff Analysis below is staff's independent assessment of the project owner's proposal to modify the project description.

PROJECT LOCATION AND DESCRIPTION

The simple-cycle natural, gas-fired, 500-megawatt electricity generating facility was certified by the Energy Commission on February 27, 2008, and the Final Decision has been amended in past years. WCEP began commercial operation on May 1, 2013. WCEP is located at 911 Bixby Drive in the City of Industry in Los Angeles County, California.

DESCRIPTION OF PROPOSED MODIFICATIONS

The proposed modifications include revising the language of several conditions of certification for air quality and worker safety, including **AQ-4, AQ-7**, and **WS-5**. For air quality, WCE is requesting to change **AQ-4**, revising the ammonia emission limit from 5.0 ppm to 5 PPMV. This change would reduce the precision of the emission limit and potentially increase the limit by 0.5 PPMV. Staff does not support this revision, which has also been rejected by the SCAQMD.

WCE is also requesting to change **AQ-7**, adding a PM2.5 testing requirement. The proposed testing would be done using the EPA Method 201A and 202, at a turbine load point of 100 percent. Staff supports this change, which was also accepted by the SCAQMD and is in the updated Title V permit. In order to be consistent with the air permit, **AQ-7** would be split into two new Conditions, **AQ-7**, and **AQ-7a**.

Staff is also proposing minor modifications to a number of other conditions of certification in response to the petition. A summary of the additional proposed changes is below. The minor modifications are administrative in nature and incorporate South Coast Air Quality Management District condition language that changed as a result of new Title V requirements.

AQ-1, Revised
AQ-2, Deleted
AQ-3, Modified
AQ-4, Modified
AQ-6, Modified
AQ-8, Modified
AQ-9, Modified
AQ-9a, New
AQ-10, Modified
AQ-11, Modified
AQ-12, Modified
AQ-13, Modified
AQ-14, Modified
AQ-15, Modified
AQ-16, Modified
AQ-17, Modified
AQ-18, Revised
AQ-19, Revised
AQ-20, New
AQ-21, New
AQ-22, New
AQ-23, New

WCEP no longer employs a security guard, and therefore, cannot comply with the health and safety training specified in **WS-5**. The amended condition would still require that appropriate staff have the specified training. **HAZ-9** contains sufficient alternative security measures such that a security guard is not required. Approval of the proposed change would not have a significant impact on power plant worker safety, and it would ensure consistency with the approved security plan.

NECESSITY FOR THE PROPOSED MODIFICATIONS

The project owner, WCE, indicated they were seeking a change to **AQ-4** in order to be consistent with other like permit conditions for similar plants, and also because they believed the change to be in keeping with best technology practices. The changes related to **AQ-7** are being requested in order to address specific testing conditions and methods, and to maintain consistency with the requested conditions in the updated SCAQMD air permit. Finally, WCE requested changes to **WS-5** because the plant no longer employs a security guard, and therefore, cannot meet the requirements of the condition. The approved operational site security plan does not require a security guard, and other protections in **HAZ-9** sufficiently protect worker safety.

STAFF'S ASSESSMENT OF THE PROPOSED PROJECT CHANGES

Staff reviewed the PTA for potential environmental effects and consistency with applicable LORS, and determined that the proposed changes would not cause significant impacts on the environment or cause the project to not comply with applicable LORS. For the technical area of Air Quality and Worker Safety, staff proposes to accept the revisions to **AQ-7**, reject the proposed revisions to **AQ-4**, and to accept the proposed changes to **WS-5**. LORS have been updated since the WCEP was approved; the changes to conditions of certification would ensure the WCEP is in conformance.

The resulting modifications would be beneficial because they would allow the project to perform testing using the most current methods, while also maintaining conformance with the SCAQMD permit. The modifications would also allow the WCEP to be able to meet the requirements of **WS-5**. Staff has concluded that the environmental impacts associated with changes to the conditions of certification would not result in any impacts that would be different than those that occurred during project construction and that the activity would not result in significant environmental impacts or risks to public health.

Staff's conclusions in each technical area are summarized in **Executive Summary Table 1**, below.

Executive Summary Table 1
Summary of Conclusions for Each Technical Area

Technical Areas Reviewed	Technical Area Not Affected	CEQA			Conforms with applicable LORS	Revised or New Conditions of Certification requested or recommended
		Potentially significant impact	Less than significant impact with mitigation	Less than significant impact		
Air Quality				X	X	X
Biology	X					
Cultural Resources	X					
Geology and Paleontology	X					
Hazardous Materials	X					
Land Use	X					
Noise	X					
Public Health	X					
Socioeconomics	X					
Traffic and Transportation	X					
Visual Resources	X					
Waste Management	X					
Water Quality and Soils	X					
Efficiency	X					
Facility Design	X					
Reliability	X					
Transmission Line Safety and Nuisance	X					
Transmission System Engineering	X					
Worker Safety				X	X	X

Staff has determined that the technical or environmental areas of Biology, Cultural Resources, Geology and Paleontology, Hazardous Materials, Land Use, Noise, Public Health, Socioeconomics, Traffic and Transportation, Visual Resources, Waste Management, Water Quality and Soils, Efficiency, Facility Design, Reliability, Transmission Line Safety and Nuisance, and Transmission System Engineering, are not affected by the proposed changes.

For the technical areas of **Air Quality** and **Worker Safety**, staff has proposed new conditions of certification (and the elimination of one condition) to assure compliance with current design standards that protect the public health and safety from environmental concerns. The details of the proposed condition changes are found in the attached **Air Quality** and **Worker Safety** Staff Analysis.

STAFF RECOMMENDATIONS AND CONCLUSIONS

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

WALNUT CREEK ENERGY PARK (05-AFC-2C)

Air Quality Analysis of Petition for Minor Modification #10

Tao Jiang, Ph.D., P.E.

INTRODUCTION

On October 4th, 2017, Walnut Creek Energy, LLC (WCE) filed a petition with the California Energy Commission requesting to amend the conditions of certification (COC) for the Walnut Creek Energy Park (WCE 2017). This amendment involves several minor permit changes to the Energy Commission's Final Decision made on February 27th, 2008 (CEC2008), Order Approving a Petition to Amend Air Quality Conditions of Certification issued on May 4th, 2011 (CEC 2011a) and Order Approving a Petition to Modify Eight and Delete Two Air Quality Conditions of Certification on December 18, 2012 (CEC2012a). Staff proposes changes to several conditions of certification based on the petition. Staff found these changes consistent with all applicable laws, ordinances, regulations and standards (LORS). Therefore, the proposed changes do not result in any significant air quality impacts.

BACKGROUND

This power plant was certified by the Energy Commission on February 27th, 2008 (CEC 2008) and began commercial operation on May 1st, 2013. The facility as approved is a nominal 500-megawatt (MW) natural gas-fired peaking power plant located in the City of Industry in Los Angeles County. The current amendment requests minor modifications to two Air Quality conditions of certification. The requested changes to the conditions are:

- **AQ-4**: Change of the ammonia emission limit from 5.0 parts per million volume (PPMV) to 5 PPMV.
- **AQ-7**: Clarification that the operating load of 100 percent of PM10 emission tests also applies to PM2.5 emission tests.

Staff proposes to accept changes to **AQ-7** with some revisions and reject those in **AQ-4**.

In addition, staff also proposes administrative changes to several Air Quality Conditions of Certification.

The staff proposed changes do not involve significant modifications to any plant equipment or facility design. These changes are consistent with all applicable laws, ordinances, regulations and standards (LORS), and do not result in any significant adverse air quality impacts. If approved by the Energy Commission, the proposed changes include compliance provisions that would ensure that the project complies with LORS (i.e., is consistent with the revised July 2018 South Coast Air Quality Management District (SCAQMD) Title V permit) and is fully mitigated.

LAWS, ORDINANCES, REGULATIONS, AND STANDARDS (LORS) - COMPLIANCE

The applicable LORS have been identified in the Final Staff Assessment (FSA) (CEC2007) and previous Staff Analyses of Proposed Modification (CEC 2011b and CEC2012b). The analysis of this amendment would not change project compliance with any LORS.

ANALYSIS OF PROJECT OWNER AMENDMENT REQUESTS

Change of the Ammonia Emission Limit

The applicant proposed to change the ammonia emission limit from 5.0 PPMV to 5 PPMV. The change in significant digits would reduce the precision of the emission limit and potentially increase the limit by approximately 0.5 PPMV. Although 5 PPMV is still used in permits for some older SCAQMD projects, SCAQMD is continuously updating the limit to 5.0 PPMV as appropriate. Therefore, staff does not think this is a proper change and proposes to reject this request. The same request has also been rejected by SCAQMD in the Title V Administrative Permit Revisions dated July 27, 2018.

Clarification of PM2.5 Testing Load

The applicant proposes to add PM2.5 source testing requirement to **AQ-7**. PM2.5 testing was added to periodic source tests which are conducted every three years. The PM 2.5 testing would be conducted using EPA Method 201A and 202. The test would be conducted at a turbine load point of 100 percent. Staff agrees to this change. The same change has also been accepted by SCAQMD and included in the updated Title V permit.

PROPOSED AMENDED CONDITIONS OF CERTIFICATION

Below is the revised **AQ-7** based on the requests from the project owner. In order to incorporate these changes and be consistent with the revised SCAQMD Title V permit, the original **AQ-7** has been broken into two separate conditions **AQ-7** and **AQ-7a**. ~~Strikethrough~~ is used to indicate deleted language and **underline and bold** is used for new language.

~~**AQ-7** The project owner shall conduct an initial source test for NOx, CO, SOx, VOC, NH_3 and PM10 and a periodic source test every three years thereafter for NOx, CO, SOx, VOC and PM10 of each gas turbine exhaust stack in accordance with the following requirements:~~

- ~~The project owner shall submit a source test protocol to the District and the CPM 45 days prior to the proposed source test date for approval. The protocol shall include the proposed operating conditions of the gas turbine, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of District Rule 304, and a description of all sampling and analytical procedures.~~

- The initial source test shall be conducted no later than 180 days following the date of first fire.
- The District and CPM shall be notified at least 10 days prior to the date and time of the source test.
- The source test shall be conducted with the gas turbine operating under maximum, average and minimum loads.
- The source test shall be conducted to determine the oxygen levels in the exhaust.
- The source test shall measure the mass flow rate in lb/hr, fuel flow rate, the flue gas flow rate and the turbine generating output in MW.
- The source test shall be conducted for the pollutants listed using the methods, averaging times, and test locations indicated and as approved by the CPM:

Pollutant	Method	Averaging Time	Test Location
NOx	District Method 100.1	1 hour	Outlet of SCR
CO	District Method 100.1	1 hour	Outlet of SCR
SOx	District Method 307-91	District approved averaging time	Fuel Sample
VOC	District Method 25.3	1 hour	Outlet of SCR
PM10 (and as a surrogate for PM2.5)	District Method 5	4 hours	Outlet of SCR
Ammonia	District Methods 5.3 and 207.1 or EPA Method 17.	1 hour	Outlet of SCR

- The source test results shall be submitted to the District and the CPM no later than 60 days after the source test was conducted.
- All emission data is to be expressed in the following units:
- ppmv corrected to 15% oxygen dry basis,
- pounds per hour,
- pounds per million cubic feet of fuel burned and
- additionally, for PM10 only, grains per dry standard cubic feet of fuel burned.
- Exhaust flow rate shall be expresses in terms of dry standard cubic feet per minute and dry actual cubic feet per minute.
- All moisture concentrations shall be expressed in terms of percent corrected to 15 percent oxygen.

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

~~following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.~~

AQ-7 The project owner shall conduct source tests for the pollutants identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOx emissions	AQMD Laboratory Method 307-91	Not Applicable	Fuel Sample
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5	4 hours	Outlet of the SCR serving this equipment
PM2.5	EPA Method 201A and 202	4 hours	Outlet of the SCR serving this equipment

The tests shall be conducted at least once every three years. The SCAQMD shall be notified of the date and time of the tests at least 10 days prior to the test.

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

The tests shall be conducted in accordance with SCAQMD approved test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 45 days before the proposed test date and shall be approved by the SCAQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The tests shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent, with the exception of PM10 and PM2.5 testing. For PM10 and PM2.5, the test shall be conducted when this equipment is operating at a load of 100 percent.

For natural gas fired-turbines only, for the purpose of demonstrating compliance with VOC BACT limits as determined by SCAQMD, the project owner shall use Method 25.3 modified as follows:

a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mmHg absolute,

b) Pressurization of the Summa canisters with zero gas analyzed/certified to contain less than 0.05 PPMV total hydrocarbons as carbon, and

c) Analysis of Summa canisters per the canister analysis portion of SCAQMD Method 25.3 with a minimum detection limit of 0.3 PPMV or less and reported to two significant figures. The temperature of the Summa canisters when extracting samples for analysis shall not be below 70 degrees Fahrenheit.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of SCAQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 PPMV VOC calculated as carbon for natural gas fired turbines.

The test results shall be reported with two significant digits.

For the purposes of this condition, an alternative test method may be allowed for each of the above pollutants upon concurrence of the CPM, SCAQMD, EPA, and CARB.

Verification: The project owner shall submit the proposed protocol for the source tests 45 days prior to the proposed source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-7a The project owner shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH_3 emissions	District method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted and the results submitted to the District within 45 days after the test date. The CPM and AQMD shall be notified the data and time of the test at least 7 days prior to the test.

The test shall be conducted at least once per year. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60-minute averaging time period.

The test shall be conducted to determine compliance with the Rule 1303 BACT concentration limit.

Verification: **The project owner shall submit the proposed protocol for the source tests 45 days prior to the proposed source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.**

ADDITIONAL PROPOSED AMENDED CONDITIONS OF CERTIFICATION

Staff proposes several additional administrative changes to other Air Quality COCs to incorporate SCAQMD condition language that has changed as a result of Title V requirements. Below are the COCs that should be updated from those approved in the 2008 Energy Commission Final Decision (CEC2008), Order Approving a Petition to Amend Air Quality Conditions of Certification issued on May 5th, 2011 (CEC 2011a) and Order Approving a Petition to Modify Eight and Delete Two Air Quality Conditions of Certification (CEC2012a). **Bold underline** is used to indicate new language. ~~Strikethrough~~ is used to indicate deleted language.

AQ-1 The project owner shall limit the emissions from each gas fired combustion turbine train exhaust stacks as follows:

Contaminant	Emissions Limit
PM10	**Less than or equal to** 2,592 lbs. in any one month
VOC	**Less than or equal to** 1,035 lbs. in any one month

~~For the purpose of this condition, the limit(s) shall be based on the emissions from a single exhaust stack. During commissioning, the VOC emissions shall not exceed 1,043 lbs in any one month.~~

~~The project owner shall calculate the emission limit(s) by using the monthly fuel use data and the following emission factors: PM10: 7.04 lb/mmscf and VOC: 2.73 lb/mmscf.~~

The project owner shall calculate the monthly emissions for PM10 and VOC using the equation below and the following emission factors: VOC: 2.73 lb/mmscf; and PM10: 7.04 lb/mmscf

Monthly emissions, lb/month = (Q) x (EF),
Where Q = monthly fuel usage, mmscf/month and EF = emission factor indicated above.

For the purpose of this condition, the limit(s) shall be based on the emissions from a single turbine.

The project owner shall limit emissions from the facility as follows:

Contaminant	Emissions Limit
PM2.5	Less than 60.89 TONS in ANY ONE YEAR
CO	Less than or equal to 112.96 TONS in ANY ONE YEAR

~~For the purpose of this condition, the PM emission limit shall be defined as particulate matter with aerodynamic diameter of 2.5 microns or less.~~

~~The CO emission limit of 112.96 tons per year in this condition shall only apply during non-commissioning years. The total annual CO emissions during the commissioning year shall not exceed 134.6 tons per year.~~

The project owner shall calculate the monthly emissions for PM2.5 and CO using the equation below and the following emission factors: PM2.5: 7.04 lbs./mmscf**; CO 13.76 lb/mmcf.** ~~or an AQMD approved factor based on compliance test data. If any valid source test performed after January 1, 2013 shows a higher PM2.5 emission rate than the factor in this condition, then those test results shall be used to calculate emissions from the date of the test forward.~~

Monthly emissions, lb/month = **(Q)** x (EF); where ~~x~~**Q** = monthly fuel usage in mmcf/month and EF = emission factor indicated above.

Compliance with the CO emission limit shall be verified through valid CEMS data.

The project owner shall calculate the emission limits for the purpose of determining compliance with the CO limit in the absence of valid CEMS data by using the above equation**.** ~~and the following emission factors:~~

~~A) During the commissioning period and prior to CO catalyst installation – 125.87 lb CO/mmcf.~~

~~B) After installation of the CO catalyst but prior to CO CEMS certification testing – 13.76 lb CO/mmscf. The emission rate shall be recalculated in accordance with condition AQ-10 if the approved CEMS certification test results in emission concentration higher than 4 ppmv.~~

~~C) After CO CEMS certification testing – 13.76 lb CO/mmscf. After CO CEMS certification test is approved by the AQMD, the emissions monitored by the CEMS and calculated in accordance with condition AQ-10 shall be used to calculate emissions.~~

For the purpose of this condition, the yearly emission limit shall be defined as a period of 12 consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

Verification: The project owner shall submit all emission calculations, fuel use, CEM records and a summary demonstrating compliance with all emission limits stated in this Condition for approval to the CPM on a quarterly basis in the quarterly emissions report (**AQ-SC10**).

AQ-2 **(DELETED)**~~The project owner/operator shall not produce emissions of oxides of nitrogen from the facility, including the firewater pump and all five gas turbines combined, that exceed the RECLAIM Trading Credits holdings required in Condition of Certification **AQ-16** within a calendar year.~~

Verification: ~~The project owner/operator shall submit to the CPM no later than 60 days following the end of each calendar year, the SCAQMD required (via Rule 2004) Quarterly Certification of Emissions (or equivalent) for each quarter and the Annual Permit Emissions Program report (or equivalent) as prescribed by the SCAQMD Executive Officer.~~

AQ-3 The 2.5 ~~ppm~~**PPMV** NOx emission limit, 2.0 ~~ppm~~**PPMV** VOC emission limit and the 4.0 ~~ppm~~**PPMV** CO emission limit shall not apply during turbine ~~commissioning,~~ start-up and shutdown **periods**. ~~The commissioning period shall not exceed 134 operating hours per turbine from the initial start-up. Following commissioning, start-ups shall not exceed 60 minutes for each startup and the number of start-ups shall not exceed 480 per year. Following commissioning, shutdowns shall not exceed 10 minutes for each shutdown. Following commissioning, the number of startups shall not exceed two per day per turbine.~~ **Start-up time shall not exceed 60 minutes. Shutdown time shall not exceed 10 minutes for each shutdown. The turbine shall be limited to a maximum of 480 start-ups per year.** Written records of ~~commissioning,~~ start-ups and shutdowns shall be ~~kept~~ maintained and made available ~~to District and submitted to the CPM for approval~~**upon request from the District Executive Officer and the CPM**. ~~The 123.46 lb/mmscf NOx emission limit(s) shall only apply during interim reporting period during initial turbine commissioning and the 10.73 lbs/mmscf shall apply only during the interim reporting period after the initial turbine commissioning period, to report RECLAIM emissions. The interim period shall not exceed 12 months from the initial start-up date.~~

Verification: ~~The project owner shall provide the District and the CPM with the written notification of the initial start-up date no later than 60 days prior to the startup date. The project owner shall submit, commencing one month from the time of gas turbine first fire, a monthly commissioning status report throughout the duration of the commissioning phase that demonstrates compliance with this condition and the emission limits of Condition **AQ-13**. The monthly commissioning status report shall include criteria pollutant emission estimates for each commissioning activity and total commissioning emission estimates. The monthly commissioning status report shall be submitted to the CPM until the report includes the completion of the initial commissioning activities.~~ The project owner shall provide start-up and shutdown occurrence and duration data as part of the Quarterly Operation Report **(AQ-SC10**). The project owner shall make the site available for inspection of the commissioning and startup/shutdown records by representatives of the District, ~~C~~ARB and the Commission.

AQ-4 The 2.5 ~~ppm~~**PPMV** NOx emissions limit(s) ~~are~~**is** averaged over 60 minutes at ~~15 percent oxygen, dry basis~~**15% O_2, dry**.

The 4.0 ~~ppm~~**PPMV** CO emission limit(s) ~~are~~**is** averaged over 60 minutes at ~~15 percent oxygen, dry basis~~**15% O_2, dry**.

The 2.0 ~~ppm~~**PPMV** VOC emission limit(s) ~~are~~**is** averaged over 60 minutes at ~~15 percent oxygen, dry basis~~**15% O_2, dry**.

The 5.0 ~~ppm~~**PPMV** NH_3 emission limit(s) are averaged over 60 minutes at ~~15 percent oxygen, dry basis~~**15% O_2, dry**.

Verification: The project owner shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report of Condition of Certification **AQ-SC10**.

AQ-5 ~~The project owner may at no time purposefully exceed either the mass or concentration emission limits set forth in Conditions of Certification **AQ-1**, **-2**, **-3** or **-4**.~~**For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.**

Verification: The project owner shall submit to the CPM for approval all emissions and emission calculations on a quarterly basis as part of the quarterly emissions report of Condition of Certification **AQ-SC10**.

AQ-6 The project owner shall limit the fuel usage from each turbine to no more than 367 ~~mmscf of pipeline quality natural gas~~**MM cubic feet** in any one **calendar** month. **For the purpose of this condition, fuel usage shall be defined as the total natural gas usage of a single turbine.** ~~The operator shall install and maintain a fuel flow meter and recorder to accurately indicate and record the fuel usage being supplied to each turbine.~~**The project owner shall maintain records in a manner approved by the District and the CPM, to demonstrate compliance with this condition. The project owner shall install and maintain a flow meter to accurately indicate the fuel usage being supplied to the turbine. The project owner shall also install and maintain a device to continuously record the parameter being measured.**

Verification: The project owner shall submit to the CPM for approval all fuel usage records on a quarterly basis as part of the quarterly emissions report of Condition of Certification **AQ-SC10**.

~~**AQ-8** The project owner shall conduct source testing of each gas turbine exhaust stack in accordance with the following requirements:~~

- ~~The project owner shall submit a source test protocol to the District and the CPM no later than 45 days prior to the proposed source test date for approval. The protocol shall include the proposed operating conditions of the gas turbine, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of District Rule 304, and a description of all sampling and analytical procedures.~~

- Ammonia source testing shall be conducted quarterly for the first 12 months of operation and annually thereafter.
- NOx concentrations as determined by CEMS shall be simultaneously recorded during the ammonia test. If the NOx CEMS is inoperable, a test shall be conducted to determine the NOx emission by using District Method 100.1 measured over a 60 minute time period.
- Source testing shall be conducted to determine the ammonia emissions from each gas turbine exhaust stack using District Method 5.3 and 207.1 or EPA Method 17 measured over a 1 hour averaging period at the outlet of the SCR.
- The District and CPM shall be notified of the date and time of the source testing at least 7 days prior to the test.
- The source test shall be conducted and the results submitted to the District and CPM within 45 days after the test date.
- Source testing shall measure the fuel flow rate, the flue gas flow rate and the gas turbine generating output.
- The test shall be conducted when the equipment is operating at 80 percent load or greater.
- All emission data is to be expressed in the following units:
  - ppmv corrected to 15% oxygen,
  - pounds per hour,
  - pounds per million cubic feet of fuel burned and

Verification: The project owner shall submit the proposed protocol for the source tests 45 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 7 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.

AQ-9 The project owner shall install and maintain a CEMS in each exhaust stack of the combustion turbine trains to measure the following parameters:

- NOx concentration in ppmv and CO concentration in ppmv.
- Concentrations shall be corrected to 15 percent oxygen on a dry basis.
- The CEMS will convert the actual CO concentrations to mass emission rates (lb/hr) and record the hourly emission rates on a continuous basis.
- The CEMS shall be installed and operated to measure CO concentration over a 15minute averaging time period.
- The CEMS shall be installed and operated in accordance with an approved District Rule 218 CEMS plan application and the requirements of Rule 2012.
- The CO CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine.

- ~~The NOx CEMS shall be installed and operating no later than 12 months after initial start-up of the turbine.~~
- ~~During the interim period between the initial start-up and the provisional certification date of the CEMS, the project owner shall comply with the monitoring requirements of Rule 2012 (h)(2) and Rule 2012 (h)(3). Within two weeks of the turbine start-up date, the project owner shall provide written notification to the District of the exact date of start-up.~~

~~**Verification:** Within 30 days of certification, the project owner shall notify the CPM of the completion of the certification process for the CEMS.~~

AQ-8 The project owner shall provide to the District a source test report in accordance with the following specifications:

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

Emission data shall be expressed in terms of concentration (PPMV) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expresses in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentrations shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

Verification: **The project owner shall submit source test results no later than 45 days following the source test date to both the District and CPM.**

AQ-9 The project owner shall install and maintain a CEMS to measure the following parameters:

CO concentration in PPMV.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be operated in accordance with approved AQMD Rule 218 CEMS plan application.

The CEMS shall be operated to measure CO concentrations over a 15-minute averaging time period.

The CEMS will convert the actual CO concentrations to mass emission rates (lb/hr) using the equation below and record the hourly emission rates on a continuous basis.

CO Emission Rate, lb/hr = K Cco Fd [20.9/(20.9%-%O_2d)][(Qg*HHV)/106], where

K = 7.267EE-8(lb/scf)/PPMV

Cco = Average of four consecutive 15 min ave CO concentration, PPMV

Fd = 8710 dscf/MMBTU natural gas

%O_2d = Hourly average % by volume O_2, dry corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross high heating value of fuel gas, BTU/scf

Verification: **Within 30 days of certification, the project owner shall notify the CPM of the completion of the certification process for the CEMS.**

AQ-9a **The project owner shall install and maintain a CEMS to measure the following parameters:**

NOx concentration in PPMV.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall comply with the requirements of Rule 2012. During provisional certification date of the CEMS, the project owner shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3).

Verification: **Within 30 days of certification, the project owner shall notify the CPM of the completion of the certification process for the CEMS.**

AQ-10 The project owner shall keep records in a manner approved by the District for the following ~~items~~ **parameter(s) or item(s)**:

- Natural Gas **fuel** use after CEMS certification
- ~~Natural Gas use during the commissioning period~~
- ~~Natural Gas use after the commissioning period and prior to the CEMS certification.~~

Verification: The project owner shall submit to the CPM for approval all fuel usage records on a quarterly basis as part of the quarterly emissions report of Condition of Certification **AQ-SC10**.

AQ-11 ~~The owner/operator shall determine the hourly ammonia slip emissions from each exhaust stack for each gas turbine train individually via the following formula:~~

- ~~District Requirement~~
  ~~NH_3 (ppmv) = [a-b*/1E6]*1E6/b~~

  ~~Where:~~

~~a = NH_3 injection rate (lb/hr) / 17(lb/lbmol),~~

~~b = dry exhaust flow rate (scf/hr) / 385.5 (scf/lbmol),~~

~~c = change in measured NOx across the SCR (ppmvd at 15% O2)~~

- ~~The above described ammonia slip calculation procedure shall not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia for the District.~~

~~The owner/operator shall install a NOx analyzer to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least once every 12 months.~~

The project owner shall calculate and continuously record NH3 slip emission using the following:

NH_3 (PPMV) = [a-b*c/1EE+06]*1EE+06/b; where

a = NH_3 injection rate (lb/hr) / 17 lb-lb-mol

b = dry exhaust gas flow rate (scf/hr) / 385.3 scf/lb-mol,

c = change in measured NOx across the SCR (PPMV at 15% O2)

The project owner shall maintain a NOx analyzer to measure the SCR inlet NOx PPMV accurate to plus or minus 5 percent calibrated at least once every twelve months.

The project owner shall use the above described method or other alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

Verification: The project owner shall include ammonia slip concentrations averaged on an hourly basis calculated via the District Requirement protocol provided as part of the Quarterly Operational Report required in Condition of Certification **AQ-SC10**. The project owner shall submit all calibration results performed to the CPM within 60 days of the calibration date.

AQ-12 ~~The operator shall install and maintain an ammonia injection flow meter and recorder to accurately indicate and record the ammonia injection flow rate being supplied to each turbine. The device or gauge shall be accurate to within plus or minus 5 percent and shall be calibrated once every twelve months.~~

~~Continuously recording is defined for this condition as at least once every hour and is based on the average of the continuous monitoring for that hour.~~

The project owner shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia. The project owner shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months. The ammonia injection rate shall not exceed 215 lb/hr.

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Verification: The project owner shall submit to the CPM no less than 30 days after installation, a written statement by a California registered Professional Engineer stating that said engineer has reviewed the as-built-designs or inspected the identified equipment and certifies that the appropriate device has been installed and is functioning properly. The project owner shall submit annual calibration results within 30 days of their successful completion.

AQ-13 ~~The operator shall install and maintain a temperature gauge and recorder to accurately indicate and record the temperature in the exhaust as the inlet of the SCR reactor. The gauge shall be accurate to within plus or minus 5 percent and shall be calibrated once every twelve months.~~

~~Continuously recording is defined for this condition as at least once every hour and is based on the average of the continuous monitoring for that hour.~~

~~Under any operating condition, including start-up, the maximum operating temperature shall not exceed 840° F.~~

The project owner shall install and maintain a temperature gauge to accurately indicate the temperature of the exhaust at the inlet to the SCR reactor. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months. The project owner shall also install and maintain a device to continuously record the parameter being measured. The catalyst temperature range shall remain between 715 degrees F and 840 degrees F, except during start-up and shutdown periods defined under Condition of Certification AQ-3.

For the purpose of this condition, continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Verification: The project owner shall submit to the CPM no less than 30 days after installation, a written statement by a California registered Professional Engineer stating that said engineer has reviewed the as-built-designs or inspected the identified equipment and certifies that the appropriate device has been installed and is functioning properly. The project owner shall submit annual calibration results within 30 days of their successful completion.

AQ-14 ~~The operator shall install and maintain a pressure gauge and recorder to accurately indicate and record the pressure differential across the SCR catalyst bed in inches of water column. The gauge shall be accurate to within plus or minus 5 percent and shall be calibrated once every twelve months.~~

~~Continuously recording is defined for this condition as at least once every month and is based on the average of the continuous monitoring for that month.~~

~~Under any operating condition, including start-up, the maximum operating pressure shall not exceed 12 inches of water.~~

The project owner shall install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column. The project owner shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months. The pressure drop across the catalyst shall not exceed 12 inches of water column.

For the purpose of this condition, continuously record shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Verification: The project owner shall submit to the CPM no less than 30 days after installation, a written statement by a California registered Professional Engineer stating that said engineer has reviewed the as-built-designs or inspected the identified equipment and certifies that the appropriate device has been installed and is functioning properly. The project owner shall submit annual calibration results within 30 days of their successful completion.

AQ-15 ~~The project owner shall limit the operating time of the firewater pump to no more than 199.99 hours per year. The firewater pump shall be equipped with a non-resettable elapsed meter to accurately indicate the elapsed operating time of the engine. The firewater pump shall be equipped with a non-resettable totalizing fuel meter to accurately indicate the fuel usage of the engine. The firewater pump shall burn only diesel fuel that contains sulfur compounds less than or equal to 15 ppm by weight.~~

~~The project owner shall operate and maintain the firewater pump according to the following requirements:~~

- ~~This equipment shall only operate if utility electricity is not available.~~
- ~~This equipment shall only be operated for the primary purpose of providing a backup source of power to drive an emergency fire pump.~~
- ~~This equipment shall only be operated for maintenance and testing, not to exceed 50 hours in any one year.~~
- ~~This equipment shall only be operated under limited circumstances under a Demand Response Program (DRP).~~

- ~~An engine operating log shall be kept in writing, listing the date of operation, the elapsed time, in hours, and the reason for operation. The log shall be maintained for a minimum of 5 years and made available to AQMD personnel and CPM upon request.~~

~~The project owner shall keep records in a manner approved by the Executive Officer; consisting of the date of operation, the elapsed time in hours, and the reason for operation.~~

The project owner shall limit the operating time of the firewater pump to no more than 200 hour(s) in any one year. For the purpose of this condition, the operating time is inclusive of time allotted for maintenance and testing.

The project owner shall limit the operating time to no more than 50 hour(s) in any one year. For the purpose of this condition, the operating time is inclusive of time allotted for maintenance and testing. Notwithstanding the requirement in this condition operating this engine beyond the 50 hours per year allotted for engine maintenance and testing purposes shall be allowed only if necessary to comply with the testing requirements of the national fire protection association (NFPA) 25 - "standard for the inspection, testing, and maintenance of water-based fire protection systems," 2002 edition or the most current edition.

The project owner shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine. The project owner shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The project owner shall install and maintain a non-resettable totalizing fuel meter to accurately indicate the fuel usage of the engine. The project owner shall also install and maintain a device to continuously record the parameter being measured.

The project owner shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

On or before January 15th of each year, the project owner shall record in the engine operating log:

A. The total hours of engine operation for the previous calendar year, and

B. The total hours of engine operation for maintenance and testing for the previous calendar year.

The project owner shall also keep records, in a manner approved by the District, for the following parameter(s) or item(s):

A. Emergency use

B. Maintenance and testing

C. Other (be specific)

In addition, for each time the engine is manually started, the log shall include the date of engine operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and the end of the operation.

Engine operation log(s) shall be retained on site for a minimum of five calendar years and shall be made available to the Executive officer or representative and the CPM upon request.

Verification: The project owner shall submit to the CPM no less than 30 days after installation, a written statement by a California registered professional engineer stating that said engineer has reviewed the as-built-designs or inspected the identified equipment and certifies that the appropriate devices have been installed and are functioning properly. The project owner shall submit all dates of operation, elapsed time in hours, and the reason for each operation in the Quarterly Operations Report (**AQ-SC10**).

AQ-16 ~~The project equipment shall not be operated unless the project owner demonstrates to the SCAQMD Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility hold sufficient RTCs in an amount equal to the annual emission increase. The project owner shall submit all such information to the CPM for approval. To comply with this condition, for each individual gas turbine, the project owner shall hold a minimum of 43,682 lbs/year of NOx RTCs and 2,280 lbs/year of SO_x RTCs for the first year of operation (commissioning year) and 35,240 lbs/year of NO_x RTCs and 2,280 lbs/year of SO_x RTCs thereafter (operating year). In addition, for the emergency fire pump the project owner shall hold a minimum of 218 lbs/year of NOx RTCs for both commissioning year and operating years.~~

Each of the turbines shall not be operated unless the facility holds 43,682 pounds of NOx RTCs and 2,280 pounds of SO_X RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The emergency fire pump shall not be operated unless the facility holds 218 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, each of the turbines shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 35,240

pounds of NOx RTCs and 2,280 pounds of SO_X RTCs valid during that compliance year. The emergency fire pump shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 218 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

Verification: The project owner shall submit all identified evidence demonstrating compliance to the CPM on an annual basis as part of the annual compliance report.

AQ-17 ~~(Deleted)~~ The project owner shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):
For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

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

~~**AQ-18** The project owner shall limit the operating time for each combustion turbine to no more than 4,000 hours in any one year. For the purposes of this condition, one year shall be defined as any time that fuel is being combusted for any purpose in the combustion turbine train. One year is defined as a period of twelve (12) consecutive months determined on a rolling basis with a new twelve month period beginning on the first day of each calendar month. The operator shall install and maintain a non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine. The measuring device or gauge shall be accurate to plus or minus 5 percent. The measuring device or gauge shall be calibrated once every 12 months.~~

~~**Verification:** The project owner shall submit to the CPM for review a record of the time of use for all fuel use on a quarterly basis as part of the quarterly emissions report of Condition of Certification **AQ-SC10**.~~

~~**AQ-19** The project owner shall not start operation of any equipment except emergency Internal combustion engine (ICE) device until both boiler units 3 and 4 currently located at AES Huntington Beach Generating Station have been retired and permits for boilers 3 and 4 have been surrendered to the SCAQMD.~~

~~**Verification:** The project owner shall provide by email and post to the U.S. mail evidence demonstrating that they have surrendered the permits to operate for Huntington Beach boilers 3 and 4 prior to the first turbine fire. The project owner shall make the site available for inspection by representatives of the District, CARB, EPA and the Commission. In addition, the project owner shall make Huntington Beach boiler units 3 and 4 available for inspection to confirm shutdown of these boilers by representatives of the District, CARB, EPA and the Commission.~~

AQ-18 The turbines are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOx	40CFR60, SUBPART	KKKK
SOx	40CFR60, SUBPART	KKKK

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

AQ-19 The emergency fire pump is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1470
Sulfur compounds	District Rule	431.2
Sulfur compounds	40CFR60, SUBPART	IIII
Sulfur compounds	District Rule	1470

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

AQ-20 The project owner shall vent the ammonia storage tank, during filling, only to the vessel from which it is being filled.

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

AQ-21 The project owner shall operate and maintain all equipment according to the following specifications:
In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 05-AFC-02 project.

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

AQ-22 The project owner shall comply with the following requirements:

The project owner shall comply with the emission standards specified in 40 CFR 60.4205(B) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(B), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission related specifications.

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

AQ-23 **The project owner shall comply with the following requirements:**
The project owner shall operate and maintain the stationary engine and control device according to the manufacturer's written emission-related instructions (or procedures developed by the operator that are approved by the engine manufacturer), change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR 89, 94 and/or 1068, as they apply.

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

CONCLUSIONS AND RECOMMENDATIONS

The staff proposed project changes would conform with applicable federal, state, and SCAQMD air quality LORS, and the amended project would not cause significant adverse air quality impacts, provided that the above conditions are included. Staff recommends that the revised conditions be approved as shown above.

REFERENCES

CEC 2007 - California Energy Commission, Final Staff Assessment of the Walnut Creek Energy Park Project (05-AFC-2). April 11, 2007.

CEC 2008 - California Energy Commission, Commission Final Decision of the Walnut Creek Energy Park Project (05-AFC-2). February 27, 2008.

CEC 2011a - California Energy Commission, Order Approving a Petition to Amend Air Quality Conditions of Certification. May 4, 2011.

CEC 2011b - California Energy Commission, Staff Analysis of Proposed Modification of Walnut Creek Energy Park (05-AFC-2C). April 4, 2011.

CEC 2012a - California Energy Commission, Order Approving a Petition to Modify Eight and Delete Two Air Quality Conditions of Certification. December 18, 2012.

CEC 2012b - California Energy Commission, Staff Analysis of Proposed Modifications to the Air Quality Conditions. October 11, 2012.

SDAPCD 2018 - South Coast Air Quality Management District, Title V Administrative Permit Revisions, Walnut Creek Energy, LLC, Facility ID 146536. July 27, 2018.

WCE 2017 - Walnut Creek Energy, LLC. Petition for Minor Modification #10. October

WALNUT CREEK ENERGY PARK (05-AFC-2C)
Worker Safety Analysis of Petition for Minor Modification #10

Geoff Lesh P.E.

INTRODUCTION

On October 4th, 2017, the Walnut Creek Energy, LLC (WCE) filed a petition with the California Energy Commission requesting to amend the conditions of certification for the Walnut Creek Energy Park (WCEP 2017). The requested changes include a minor change to Worker Safety-5 (**WS-5**). Staff found this change consistent with all applicable laws, ordinances, regulations and standards (LORS) and would not result in any significant environmental impacts or impacts to worker safety.

BACKGROUND

WCEP was certified on February 27, 2008, and is a 500-megawatt simple-cycle gas-fired peaking power plant. The project commenced operation on May 1, 2013. WCEP is located at 911 Bixby Drive in the City of Industry in Los Angeles County, California. The requested change is as follows:

WORKER SAFETY-5 The project owner shall ensure that a portable automatic cardiac defibrillator is located on site during construction and operations and shall implement a program to ensure that the equipment is properly maintained and functioning at all times and that for each shift on-site personnel shall be trained in the American Heart Association's Heartsaver Automatic External Defibrillator (AED) Course, or equivalent, as follows:

Construction: minimum 4 personnel per shift, including one security guard,
Operation: minimum 2 personnel per shift~~, including one security guard~~.

Verification: Verification: At least 30 days prior to the start of site mobilization the project owner shall submit to the CPM proof that a portable automatic cardiac defibrillator exists on site and a copy of the training and maintenance program for review and approval.

WCE no longer employs a security guard, and therefore, cannot satisfy Condition of Certification **WS-5**. Approval of the proposed change would not have an impact on power plant worker safety, and it would provide consistency with the approved security plan. The amended condition would still require that at least 2 personnel per shift would have training in operation of the AED. Hazardous Materials Condition of Certification **HAZ-9** is not affected by the proposed change.