

**CALIFORNIA ENERGY COMMISSION**1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

**DOCKET****05-AFC-2C**DATE MAY 04 2011RECD. MAY 04 2011

<b>In the Matter of:</b>	)	<b>Docket No. 05-AFC-2C</b>
	)	
<b>WALNUT CREEK ENERGY, LLC</b>	)	<b>Order No. 11-0504-2</b>
	)	
	)	
<b>WALNUT CREEK ENERGY PARK</b>	)	<b>ORDER APPROVING</b>
	)	<b>A PETITION TO AMEND</b>
	)	<b>AIR QUALITY CONDITIONS OF CERTIFICATION</b>

Walnut Creek Energy, LLC filed a petition on March 8, 2011 that was later revised and submitted on April 1, 2011 with the California Energy Commission (Energy Commission) requesting to modify the Walnut Creek Energy Park Project air quality Conditions of Certification for particulate matter (PM) 10, volatile organic compound (VOC), and sulfur oxide (SOx) consistent with the South Coast Air Quality Management District's Final Determination of Compliance (FDOC).

**STAFF RECOMMENDATION**

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, section 1769(a) of the California Code of Regulations and recommends approval of Walnut Creek Energy, LLC petition to modify the Walnut Creek Energy Park Project and amend related Conditions of Certification.

**ENERGY COMMISSION FINDINGS**

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards (LORS), subject to the provisions of Public Resources Code section 25525;
- The proposed modifications to the Air Quality Conditions of Certification will result in a beneficial change by ensuring compliance with SCAQMD Rule 1309.1 and 1304(a)(2); and,

- There has been a substantial change in circumstances since the Energy Commission certification justifying the change and the change is based on information that was not available to the parties prior to Energy Commission certification in that the proposed modifications relate to the most recent air quality emission limit requirements as determined by the SCAQMD.

**CONCLUSION AND ORDER**

The California Energy Commission hereby adopts staff's recommendations and approves revisions to the Decision, and the following changes to the Walnut Creek Energy Park Project Decision. Deleted text is in ~~strikethrough~~, new text is **underlined and bold**.

**AIR QUALITY CONDITIONS OF CERTIFICATION**

**AQ-SC7** To comply with offset requirements an affiliate of WCE, under common ownership of Edison Mission Energy (EME), has been created to purchase two electric utility steam boilers from AES Huntington Beach, LLC, and will permanently retire these units to qualify for a partial offset exemption on a net megawatt to net megawatt basis (450 MWs). The project owner shall **also** provide emission reduction credits (**ERCs**) to offset turbine exhaust and emergency equipment ~~for~~ **NO<sub>x</sub>, VOC, SO<sub>x</sub>, PM10 and PM2.5 emissions associated with the increased generating capacity of 50.5 MWs** in the form and amount required by the District. RECLAIM Trading Credits (RTCs) shall be provided for NO<sub>x</sub> **and SO<sub>x</sub>** as is necessary to demonstrate compliance with Condition of Certification **AQ-16**.

**The project shall be exempt under District Rule 1304(a)(2) from providing ERCs** ~~Emission reduction credits (ERCs) or SCAQMD Priority Reserve Credits (PRCs) shall be provided for SO<sub>x</sub> (45 lb/day) and PM10 (463 b/day). Emission reduction credits only shall be provided for VOC (220 lb/day, includes an offset ratio of 1.2).~~ **for VOC, and PM10/PM2.5 for 89.91 percent of the full amount required by the District for these pollutants and shall provide ERCs at an offset ratio of 1.2:1.0 for the remaining 10.09 percent in accordance with the following:**

<b><u>Pollutant (lb/day)</u></b>	<b><u>VOC</u></b>	<b><u>PM10/PM2.5</u></b>
<b><u>1. Total emissions to be offset</u></b>	<b><u>173.82</u></b>	<b><u>432.00</u></b>
<b><u>2. Emissions not exempt from offsetting under Rule 1304(a)(2) (10.09%)</u></b>	<b><u>17.54</u></b>	<b><u>43.59</u></b>
<b><u>3. ERCs required to offset non-exempt emissions at a ratio of 1.2 lb/day offsets to 1 lb/day non-exempt emissions</u></b>	<b><u>21</u></b>	<b><u>52</u></b>

The project owner shall surrender the ERCs, ~~if applicable,~~ for SO<sub>x</sub>, VOC and PM10/PM2.5 from among those that are listed in the table below or a modified list, as allowed by this condition. If additional ERCs are submitted, 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) will not cause the project to result in a significant environmental impact, and the District confirms that each requested change is consistent with applicable federal and state laws and regulations.

The project owner shall request from the District **the verification to identify the ERCs used to offset the project emissions.** ~~a report of the NSR Ledger Account for the project after the District has issued the Permit to Construct. This report is to specifically identify the ERCs and PRCs used to offset the project emissions.~~

Certificate Number	Amount (lb/day)	Pollutant
AQ003679	8	VOC
AQ002683	1	VOC
Former AQ004209	117	VOC
Former AQ006303	100	VOC

**Verification: At least 10 days prior to commencement of construction,** ~~t~~**The project owner shall submit to the CPM the NSR Ledger Account, provide CPM by email and post to the U.S. mail a copy of the SCAQMD approved Permit to Construct to** showing that the project's offset requirements have been met, **by actual offset or exemption under Rule 1304(a)(2).** ~~15 days prior to initiating construction for Priority Reserve Credits, and 30 days prior to turbine first fire for traditional ERCs. Prior to commencement of construction, the project owner shall obtain sufficient RTCs to satisfy the District's requirements for the first year of operation as prescribed in Condition of Certification AQ-16. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and commission docket. The CPM shall maintain an updated list of approved ERCs for the project.~~

**AQ-SC8 Deleted.**

**District Conditions of Certification – Revised Determination of Compliance**

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



Contaminant	Emissions Limit
PM10	2,778 <u>2,592</u> lbs in any one month
CO	6,532 lbs in any one month
SOx	281 lbs in any one month
VOC	1,106 <u>1,035</u> 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: ~~6.93~~7.04 lb/mmscf and VOC: ~~2.00~~2.73 lb/mmscf. & SOx: 0.71 lb/mmscf.

~~The project owner shall calculate the emission limit(s) for CO during the commissioning period, using fuel consumption data and the following emission factors: 125.87 lb/mmscf.~~

~~The project owner shall calculate the emission limit(s) for CO after commissioning period and prior to the CO CEMS certification, using fuel consumption data and the following emission factors: 17.15 lb/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 6 ppmv.~~

~~The project owner shall calculate the emission limit(s) for CO after the CO CEMS certification, based on readings from the certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated with the following emission factor: 17.15 lbs/mmscf.~~

~~During Commissioning, the CO emissions shall not exceed 7,441 lbs/month and the VOC emissions shall not exceed 1,114 lbs/month.~~

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

**AQ-3** The 2.5 ppm NOx emission limit, 2.0 ppm VOC emission limit and the ~~6.0~~ **4.0** ppm CO emission limit shall not apply during turbine commissioning, start-up and shutdown. 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 ~~350~~ **480** per year. Following commissioning, shutdowns shall not exceed 10 minutes **for each shutdown**. ~~and the number of shutdowns~~ **startups** shall not exceed ~~one~~ **two** per day per turbine. Written records of commissioning, start-ups and shutdowns shall be kept and made available to District and submitted to the CPM for approval. The 123.46 lb/mmscf NOx emission limit(s) shall only apply during interim reporting period during initial turbine commissioning and the 10.29 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 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, CARB and the Commission.

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

The ~~6.0~~ **4.0** ppm CO emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry basis.

The 2.0 ppm VOC emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry basis.

The 5.0 ppm NH3 emission limit(s) are averaged over 60 minutes at 15 percent oxygen, dry basis.

**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 ~~393~~ **367** mmscf at 1,050 BTU/scf of pipeline quality natural gas in any one month. 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.

**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-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, the project owner shall hold a minimum of 40,764 ~~44,823,2843,900~~ lbs/year of NO<sub>x</sub> RTCs **and 2,325,362,280 lbs/year of SO<sub>x</sub> RTCs** for the first year of operation and 32,319 ~~35,281,1435,458~~ lbs/year **of NO<sub>x</sub> RTCs and 2,280.08-lbs/year of SO<sub>x</sub> RTCs** thereafter.

**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-19 The project owner shall not start operation of any equipment 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.**

IT IS SO ORDERED.

Date: May 4, 2011

STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION



ROBERT WEISENMILLER, Chair