CALPINE

LOS ESTEROS CRITICAL ENERGY FACILITY
800 THOMAS FOON CHEW WAY
SAN JOSE, CALIFORNIA 95134

November 14, 2006

Mr. Lance Shaw
Compliance Project Manager
Systems Assessment & Facility Siting Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

RE: PETITION TO AMEND LOS ESTEROS CRITICAL ENERGY FACILITY'S CONDITIONS OF CERTIFICATION APPLICATION 01-AFC-12

Dear Mr. Shaw:

Please find the attached amended application that was previously submitted on June 22, 2005. Based on discussions with the Bay Area Air Quality Management District some of the Conditions of Certification that had been proposed for modification have been deleted. The revisions are shown in strikethrough for your convenience.

Please contact me at (408) 592-7418 if you have any questions regarding this submittal.

Sincerely,

Allison Bryan
Compliance Manager

MAILING ADDRESS: 3800 CISCO WAY, SAN JOSE, CA 95134 • (408) 456-2690 • (408) 456-0421 (FAX)

PETITION FOR INSIGNIFICANT AMENDMENTS TO OPERATIONS CONDITIONS OF CERTIFICATION
(November 14, 2006)

PETITION FOR INSIGNIFICANT AMENDMENTS TO OPERATIONS CONDITIONS OF CERTIFICATION

As required by Section 1769 of the CEC Siting Regulations, LECEF hereby submits the following discussion to amend Conditions ~~AQ-19 b~~., AQ -24, AQ-26, AQ-27, and AQ-35 of LECEF's Application for Certification 01-AFC-12.

Pursuant to Section 1769 (a)(1)(A) and (B), a description of the proposed modifications, including new language for affected conditions and the necessity for the modifications is required.

The modifications proposed to the conditions of certification are as follows:

~~To maintain consistency throughout the Calpine plants and to implement an ammonia monitoring technique that is more accurate and operator friendly, we are requesting that Condition AQ-19b be changed to require the monitoring of the ammonia slip as a concentration level as opposed to a molar ratio. This calculation has been approved by the BAAQMD and includes a bias factor, which relates the calculation to the results of each source testing conducted at the plant. In order to reflect the current calculation being used to monitor ammonia slip as agreed to by the BAAQMD, LECEF proposes to change the Application for Certification Condition as follows:~~

~~AQ-19b. Ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15% O2 (three-hour rolling average), except during periods of startup and shutdown as defined in this permit. The ammonia emission concentration shall be verified by a District-approved corrected ammonia slip calculation. The correction factor shall be determined during any District required source test.~~

The changes to condition AQ-24a and b are being proposed to correct the hourly and daily maximum heat input limits to accurately reflect the operating capacity of the LM6000. These changes will not affect emissions at the plant.

AQ-24 Operational Limits: In order to comply with the emission limits of this rule, the owner/operator shall comply with the following operational limits:

a. The heat input to any gas turbine shall not exceed:
b. Hourly: 500 MMBtu/hr
   Daily: 12,000 MMBtu/day
   Four Turbines
   Annual: 17,520,000 MMBtu/year

~~Since our gas supplier cannot guarantee meeting the total sulfur content of 0.25 gr/100scf, we would like to request revising the limit in AQ-24c to 1.0 gr/100 scf as follows:~~

~~AQ-24~~

> ~~c. Only PUC Quality natural gas (General Order 58-a) shall be used to fire the gas turbine. The natural gas shall not contain total sulfur in concentrations exceeding 1.0 gr./100 scf.~~

~~This change will not affect SO2 emission limits established in this permit.~~

The changes to condition AQ-26 are being proposed based on the infrequent operation of these peaking facilities. The District typically imposes an annual source test requirement on facilities assuming that the facility is in operation most of the year. The purpose of the source testing is to determine compliance with emission limits as a facility's equipment is operated over time. Since this facility is a peaking facility, it makes sense to only require source testing every 8,000 hours of operation, which is essentially equivalent to one year of operation. We are also requesting a time frame of sixty days from the completion of a source test to submit the results to the District. Past experience has indicated that source test vendors require more than thirty days to complete analyses and provide a report. Calpine proposes to amend Condition AQ-26 as follows:

AQ-26. Source Testing/RATA: Within sixty days after startup of the gas turbines, and at a minimum on an annual basis thereafter, a relative accuracy test audit (RATA) must be performed on the CEMS in accordance with 40 CFR Part 60 Appendix B Performance Specifications.A source test shall be performed at least every 8,000 hours of gas turbine operation. Additional source testing may be required at the discretion of the District to address or ascertain compliance with the requirements of this permit. The written test results of the source tests shall be provided to the District within sixty days after testing. The complete test protocol shall be submitted to the District no later than 30 days prior to testing, and notification to the District at least ten days prior to the actual date of testing. The source test protocol shall comply with the following: measurements of NOx, CO, POC, and stack gas oxygen content in accordance with ARB Test Method 100; measurements of PM10 in accordance with ARB Test Method 5 and 202; and measurements of ammonia in accordance with Bay Area Air Quality Management District test method ST-1B. Alternative test methods, and source testing scope, may also be used to address the source testing requirements of the permit if approved in advance by the District. The owner/operator shall include initial and annual source tests parameters specified in the approved test protocol, and at a minimum include the following:

Calpine would like to amend Condition AQ-27 to allow for the use of a calculation based on the total sulfur levels in the fuel to demonstrate compliance with SAM emission limits

in Condition AQ-23. As previously discussed with BAAQMD, the method for measuring sulfuric acid mist would not result in a detection limit low enough to prove compliance with the emissions limits in Condition AQ-23. We are currently submitting calculations based on the fuel gas sulfur to comply with this condition. As long as we are in compliance with our fuel gas sulfur limit listed in Condition AQ-24 c., the limit contained in AQ-23 listed above cannot be exceeded. Therefore, as long as compliance is demonstrated with Condition AQ-23 there is no need to conduct further source testing or calculations to prove compliance with this condition. We would like AQ-27 to read as follows:

AQ-27 Within 60 days of start-up of the LECEF the owner/operator shall demonstrate compliance with the SAM levels in AQ-23 using the calculation method based on total sulfur levels in the fuel and a speciation based on the EPA guidance document "Emergency Planning and Community Right To Know Act – Section 313-Guidance for Reporting Sulfuric Acid".

~~Based on the fuel monitoring schedule referenced in condition AQ-29, a fuel sulfur analysis may not be required in all quarters. We suggest that this condition be revised to:~~

~~AQ-34g Results of required fuel analyses for HHV and total sulfur content obtained during the quarter. (Basis: record keeping & reporting).~~

Since offsets have already been provided, LECEF proposes to delete condition AQ-35

Pursuant to Section 1769 (C), a discussion is required on if the modification is based on information that was known by the petitioner during the certification proceeding, and an explanation of why the issue was not raised at that time.

The changes being requested to ~~AQ-19b,~~ 24, 26 and 27 are based on new information that was learned as a result of operating experience gained at the facility and was not known at the time of certification. Changes to AQ~~-28, 34, and~~ 35 have been requested to clarify requirements and maintain consistency with requested changes to the BAAQMD and Title V permits.

Pursuant to Section 1769 (D), a discussion is required on whether the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, and explanation of why the change should be permitted.

The proposed changes ~~to AQ-19b~~, 24, 26 and 27 are based on information learned after the completion of the certification process during the commissioning and operation phase of the project. Changes to AQ-~~28, 34, and~~ 35 are additional minor clarifications. Since the changes are administrative and improve the accuracy of compliance determinations, Calpine believes the proposed changes do not undermine the assumptions, rationale, findings or other bases of the final decision.

Pursuant to Section 1769 (E), an analysis of the impacts the modifications may have on the environment and proposed measures to mitigate any significant adverse impacts is required.

The proposed changes to the conditions of certification do not result in any significant adverse environmental impact.

Pursuant to Section 1769 (F), a discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards is required.

The proposed amendments will have a positive impact on the facility's ability to comply with applicable laws, ordinances, regulations, and standards. ~~The proposed change in the calculation method for ammonia slip is more accurate than previous methods used.~~ The proposed change to the total sulfur calculation method enables the facility to demonstrate compliance with SAM levels, whereas, the original source test method could not, as the minimum analytical detection limits were too high.

Pursuant to Section 1769 (G), a discussion of how the modifications affect the public is required.

Calpine asserts that the proposed modifications to the conditions of certification will not adversely affect the public.

Pursuant to Section 1769 (H), a list of property owners potentially affected by the modification is required.

The proposed amendments are administrative in nature, therefore no property owners will be affected by the modification.

Pursuant to Section 1769 (I), a discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings is required.

The proposed amendments will have no impact on property owners, the public, or any other parties.

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