

PASTORIA ENERGY FACILITY, L.L.C.

717 TEXAS AVENUE  
SUITE 1000  
HOUSTON, TX 77002

<b>DOCKET</b>	
<b>99-AFC-7C</b>	
DATE	DEC 21 2011
RECD	JAN 04 2012

December 21, 2011

Ms. Mary Dyas  
Compliance Project Manager  
California Energy Commission  
1516 Ninth Street, MS-15  
Sacramento, CA 95814

**RE: Pastoria Energy Facility – 99 AFC 7C  
AGP Component Replacement Project**

Dear Ms. Dyas:

Pursuant to Section 1769 of the California Energy Commission (CEC) Siting Regulations, Pastoria Energy Facility LLC, hereby submits the attached Petition for a Staff Approved Project Change to Amend Docket No. 99-AFC-7C. The requested changes do not effect the project description or any existing Conditions of Certification.

The Pastoria Energy Facility plans to replace certain components of the Advanced Gas Path (AGP) on two of the existing combustion turbines. The Project Owner plans to replace certain hot gas path components such as turbine blades, nozzles, and associated structural elements with parts that are designed to operate at new, higher firing temperatures. These components will be functionally identical to the existing equipment except that they will be made from advanced materials that can withstand higher temperatures. These replaced components will improve the turbine heat rate, generating power more efficiently. To support the higher operational temperatures, additional temperature sensors, instrumentation, controls, and piping will be added to the turbine package. The project will not affect the operation of the low NOx combustors or the selective catalytic reduction emissions control systems.

Because of the harsh environment in which they operate, hot gas path components are regularly replaced according to industry accepted maintenance cycles. The current installed hot gas path components are scheduled to be replaced during the planned major maintenance outage in April 2012.

The facility will continue to meet all existing air emissions limits established in the existing permits. A letter describing these changes was submitted to the San Joaquin Valley Air Pollution Control District and response received that no permitting is required for this project. The request and response letters are attached.

In summary, the replacement of certain AGP components is not a significant change in the design of the facility, and will not result in significant changes in operation. These improvements do not require any changes in the project description or Conditions of Certification as set forth in the 1999 Commission Decision, as most recently amended on December 27, 2004.

Please do not hesitate to contact me if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'Barbara McBride', written over the word 'Sincerely,'.

Barbara McBride

Attached:      Petition for a Staff Approved Project Change  
                    Letter to SJVAPCD, dated December 2, 2011  
                    Letter from SJVAPCD, dated December 9, 2011

**PASTORIA ENERGY FACILITY  
PETITION FOR A STAFF APPROVED PROJECT CHANGE**

As required by Section 1769 of the CEC Siting Regulations, Pastoria Energy Facility LLC (PEF) hereby submits the following information in support of a staff approved project change.

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

The PEF plans to replace certain components in the Advanced Gas Path (AGP) on two of the three existing turbines - S-1 and S-2. These replaced components will improve the turbine heat rate, using less fuel to generate the same amount of power.

The facility will continue to meet all existing heat input and emissions limits established in the existing permits.

There are no changes to the PEF Conditions of Certification.

The Project Owner plans to replace certain hot gas path components such as turbine blades, nozzles, and associated structural elements with parts that are designed to operate at new, higher firing temperatures. These components will be functionally identical to the existing equipment except that they will be made from advanced materials that can withstand higher temperatures. These replaced components will improve the turbine heat rate, generating power more efficiently. To support the higher operational temperatures, additional temperature sensors, instrumentation, controls, and piping will be added to the turbine package. The project will not affect the operation of the low NOx combustors or the selective catalytic reduction emissions control systems.

**Pursuant to Section 1769(a)(1)(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 new and improved components of the were not available at the time of the certification of PEF.

**Pursuant to Section 1769(a)(1)(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 AGP components replacement does not undermine the assumptions, rational or findings of the final decision. The replacement should be permitted in order to improve operating efficiency and reduce fuel consumption.

**Pursuant to Section 1769(a)(1)(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 AGP components replacement will not result in any significant adverse environmental impact; instead it will increase efficiency and decrease fuel consumption – both positive environmental impacts

**Pursuant to Section 1769(a)(1)(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 AGP components replacement will have a positive impact on the facility's ability to comply with applicable LORS. The efficiency of the existing facility will increase.

**Pursuant to Section 1769(a)(1)(G), a discussion of how the modifications affect the public is required.**

The proposed modifications to the project will not adversely affect the public. These proposed modifications do not result in new construction or other physical changes to the environment and do not negatively impact air quality or public health. There are no significant adverse effects on property owners that will result from the replacement of these components.

**Pursuant to Section 1769(a)(1)(H), a list of property owners potentially affected by the modification is required.**

No property owners will be affected by the replacement of these AGP components.

**Pursuant to Section 1769(a)(1)(I), a discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings is required.**

Because of the harsh environment in which they operate, hot gas path components are regularly replaced according to industry accepted maintenance cycles. The proposed AGP components replacement will have no significant environmental effects and will be in compliance with applicable LORS. Therefore, the proposed components replacement will have no impact on property owners, the public, or any other parties.

**PASTORIA ENERGY FACILITY, L.L.C.**

717 Texas Avenue  
Suite 1000  
Houston, TX 77002

December 2, 2011

Mr. David Warner  
Director of Permit Services  
San Joaquin Valley Air Pollution Control District  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244

RE: Pastoria Energy Facility Thermal Improvement Project

Dear Mr. Warner:

The Pastoria Energy Facility plans to alter the Advanced Gas Path (AGP) on two of the existing combustion turbines. The alteration will improve the turbine heat rate, generating more power from the same amount of fuel; however, the facility will continue to meet all existing emissions limits established in the existing permits.


The improved efficiency will be obtained by increasing the turbine firing temperature. The existing hot gas path components such as turbine blades, nozzles, and associated structural elements are not designed to operate at such high temperatures and must be replaced. These components will be functionally identical to the existing equipment except that they will be made from advanced materials that can withstand higher temperatures. To support the higher operational temperatures, additional temperature sensors, instrumentation, controls, and piping will be added to the turbine package. The project will not affect the operation of the low NOx combustors or the selective catalytic reduction emissions control systems.

Because of the harsh environment in which they operate, hot gas path components are regularly replaced according to industry accepted maintenance cycles. The hot gas path components are currently scheduled to be replaced during the next major outage in April 2012.

This change does not meet the definition of a modification contained in SJVUAPCD Rule 2201, section 3.25. There will be no changes to any permit conditions and there will be no increase in emissions above currently permitted rates.

If you have any questions, please contact me at 925-570-0849.

Sincerely,



Barbara McBride  
Director, Environmental, Health and Safety  
Calpine Corporation – Western Region

DEC 09 2011

Barbara McBride  
Director, Environmental, Health and Safety  
Calpine Corporation – Western Region  
4160 Dublin Blvd.  
Dublin, CA 94568

**Subject: Determination of Permit Requirements for Pastoria Energy Facility  
Thermal Improvement Project, Facility: S-3636**

Dear Ms. McBride:

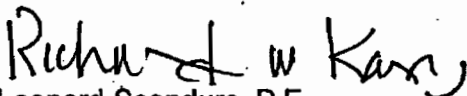
The District has reviewed your December 2, 2011 letter requesting determination of permit requirements for Pastoria's plan to replace the hot gas path components on two of the existing combustion turbines. The proposed components, which include turbine blades, nozzles and associated structural elements, will be functionally identical to the existing equipment. There will be no changes to any of the permit conditions and currently permitted emissions.

Based on our review, the District has determined that this improvement project can be considered routine maintenance and therefore is exempt from District permitting requirements.

Thank you for your cooperation in this matter. Should you have any questions, please telephone Ms. Dolores Gough of Permit Services at (661) 392-5609.

Sincerely,

David Warner  
Director of Permit Services

  
Leonard Scandura, P.E.  
Permit Services Manager

DW: dg

cc: Compliance

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

---

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585