

DOCKETED

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Project Title:	Pastoria Energy Facility Compliance
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PASTORIA ENERGY FACILITY, L.L.C.

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August 2, 2013

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

**RE: REQUEST FOR A STAFF APPROVED MODIFICATION
DOCKET NO. 99-AFC-7C**

Dear Ms. Dyas:

Pursuant to Section 1769 of the California Energy Commission (CEC) Siting Regulations, Pastoria Energy Facility, L.L.C. ("Pastoria") hereby submits the attached Request for a Staff Approved Modification to Docket No. 99-AFC-4C ("Modification").

This Modification requests approval to install a second brine crystallizer to Pastoria's Zero Liquid Discharge system ("ZLD"). The ZLD is currently undersized in light of the quality of the water received by Pastoria and its high concentration of dissolved solids. As described in the Modification, the addition of a second crystallizer will allow the plant to process water more efficiently. Installation of the crystallizer will not result in any significant adverse effect on the environment.

Please contact me at (925)-570-0849 if you have any questions regarding this submittal.

Sincerely,



Barbara McBride
Director, Environmental Services

Attachment- Amendment No. 10

Request for a Staff Approved Modification

Pastoria Energy Facility

99-AFC-7C

Amendment No. 10

**Submitted by
Pastoria Energy Facility, L.L.C.**

August 2013

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1.0 Introduction

1.1 Overview of Amendment

Pastoria Energy Facility, LLC ("Pastoria") operates the Pastoria Energy Facility ("Project"), a facility located in southeastern Kern County near the unincorporated communities of Grapevine and Lebec about 30 miles south of Bakersfield. The facility consists of a 750 MW (nominal) combined-cycle natural gas-fired power plant.

The Commission granted the original license for the Project on December 21, 2000 (hereinafter, "Decision"). The Decision has been previously amended 10 times.

This Amendment requests approval to install a second brine crystallizer to the Project's Zero Liquid Discharge system ("ZLD"). The ZLD processes all project wastewater streams except for sanitation and storm water streams. The ZLD concentrates the dissolved and suspended constituents in the wastewater through a combination of evaporation and crystallization, which results in non-hazardous salt cake that is then removed from the site. The Brine Crystallizer evaporates water off of the wastewater and feeds to a filter press where the salt cake is made.

The ZLD is currently undersized in light of the quality of the water received by the Project and its high concentration of dissolved solids. The addition of a second crystallizer will allow the plant to process water more efficiently. The second crystallizer will be installed immediately adjacent to the existing crystallizer.

Installation of the second crystallizer will not result in any significant adverse effect on the environment. This installation will allow the Project to continue to comply with all applicable laws, ordinances, regulations or standards. Accordingly, Pastoria requests that this Amendment be processed as a staff-approved modification pursuant to the Commission's Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769(a)(2), Post-Certification Amendments and Changes) because there are no changes to any conditions of certification contained in the Decision.

This Amendment contains all of the information that is required pursuant to the CEC's Siting Regulations (CCR Title 20, § 1769). The information necessary to fulfill the requirements of Section 1769 is contained in Sections 1.0 through 6.0 as summarized in Table 1 below.

TABLE 1
Informational Requirements for Post-Certification Amendments and Changes

Section 1769 Requirement	Section of Petition Fulfilling Requirement
(A) A complete description of the proposed modifications, including new language for any conditions that will be affected	Section 2.0—Proposed modifications Sections 2.2—No proposed changes to conditions of certification, one change to project description
(B) A discussion of the necessity for the proposed modifications	Section 2.3
(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time	Section 3.2
(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted	Sections 3.2
(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts	Section 3.1
(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards;	Section 3.2
(G) A discussion of how the modification affects the public	Section 4.0
(H) A list of property owners potentially affected by the modification	Section 5.1
(I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.	Section 5.2

1.2 Summary of Environmental Impacts

Section 1769 (a)(1)(E) of the Commission's Siting Regulations requires that an analysis be conducted that addresses the impacts a modification might have on the environment and proposed measures to mitigate any significant adverse impacts. In addition, Section 1769 (a)(1)(F) requires a discussion of the impacts that a modification might have on the Project's ability to comply with applicable laws, ordinances, regulations and standards (LORS). Section 3.0 of this Amendment addresses potential environmental impacts and consistency of this Amendment with LORS.

2.0 Description of Project Changes

Consistent with California Energy Commission Siting Regulations Section 1769 (a)(1)(A) and 1769(a)(1)(B), this section includes a complete description of the physical changes being proposed to the Project, as well as the necessity for this Amendment.

2.1 Addition of a Brine Crystallizer to the Zero Liquid Discharge

This Amendment requests authorization to add a second brine crystallizer to the ZLD. The additional brine crystallizer will allow the plant to process water more efficiently.

The following equipment will be installed: a crystallizer flash tank, a crystallizer condenser, a crystallizer forced circulation heat exchanger, a crystallizer vacuum pump, a crystallizer distillate pump, a condensate tank, a crystallizer condensate pump, a crystallizer recirculation pump, and a crystallizer slurry recycle pump. The installation will be immediately to the left of the existing crystallizer in the ZLD and will not be visible from the outside of the facility.

There will be no emissions increase associated with this Project change.

2.2 Whether The Proposed Changes Are Based on Information Known at the Time of Certification

Pursuant to Section 1769(a)(1)(C), a discussion is required 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 need for a second brine crystallizer was not known during the certification proceeding. Instead, the need for a second brine crystallizer became known after commencement of commercial operations, and has been exacerbated over the past two years of operation of the Project, as Pastoria has observed an increase in dissolved solids in the water received by the Project, which has required more processing.

2.2 Necessity of Proposed Changes

The ZLD is currently undersized. Thus, a second brine crystallizer will help the ZLD evaporate more wastewater for feeding into the filter press. This will allow the Project to process water more efficiently. Water quality in the past two years has dramatically decreased due to a higher concentration of dissolved solids, which requires more processing.

3.0 Environmental Analysis of the Project Changes

The proposed Project changes are evaluated below according to the type of change. Within each of the following sections, an environmental analysis for each of the 14 different discipline areas addresses whether there are any significant potential changes to environmental impacts of the project that are a result of this Amendment. Each section includes an environmental analysis. The environmental disciplines are addressed, as follows:

- 3.1 AIR QUALITY
- 3.2 BIOLOGICAL RESOURCES
- 3.3 CULTURAL RESOURCES
- 3.4 GEOLOGY AND PALEONTOLOGY
- 3.5 HAZARDOUS MATERIALS MANAGEMENT
- 3.6 LAND USE
- 3.7 NOISE AND VIBRATION
- 3.8 PUBLIC HEALTH
- 3.9 SOCIOECONOMICS
- 3.10 SOIL AND WATER RESOURCES
- 3.11 TRAFFIC AND TRANSPORTATION
- 3.12 VISUAL RESOURCES
- 3.13 WASTE MANAGEMENT
- 3.14 WORKER SAFETY AND FIRE PROTECTION

3.1 Installation of a Second Brine Crystallizer

3.1.1 Air Quality

The installation of a second brine crystallizer will have no impact on air quality, because the crystallizer does not produce any air emissions.

3.1.2 Biological Resources

The installation of a second brine crystallizer will have no impact on biological resources, because the crystallizer will be located on an existing gravel pad inside the existing fenceline of the Project.

3.1.3 Cultural Resources

The installation of a second brine crystallizer Amendment will have no impact on cultural resources, because the installation will not involve excavation or ground disturbance..

3.1.4 Geology and Paleontology

The installation of a second brine crystallizer will have no impact on geology and paleontology, because the installation will not involve excavation or ground disturbance. There will be holes no more than two feet deep made on previously disturbed ground.

3.1.5 Hazardous Materials Management

There will be no additional hazardous materials brought on site nor will there be a change to the chemical inventory. Therefore, the installation of a second brine crystallizer will have no effect on hazardous materials management.

3.1.6 Land Use

The installation a second brine crystallizer does not require a change in land uses or applicable land use LORS.

3.1.7 Noise and Vibration

The operation of a second brine crystallizer will not increase noise emissions from the Project. The construction of the second crystallizer may result in brief, temporary noises, but these noise levels will remain below the applicable noise standards.

3.1.8 Public Health

The installation of the second brine crystallizer will have no impact on public health.

3.1.9 Socioeconomics

The installation of the second brine crystallizer will have no socioeconomic impacts.

3.1.10 Soil and Water Resources

The installation of the second brine crystallizer will have no impacts on soil or water resources. As with the existing brine crystallizer, the second brine crystallizer will be an integral part of the ZLD designed to ensure that there will be no impact to soil or water resources.

3.1.11 Traffic and Transportation

The installation of the second brine crystallizer will not result in changes to the Decision's conditions, findings or conclusions regarding traffic and transportation. It is not anticipated that the operation of the ZLD with the second brine crystallizer will lead to any material increase in traffic to or from the site.

3.1.12 Visual Resources

The installation of the brine crystallizer will not be visible outside the fenceline of the Project and therefore will have no impact on visual resources.

3.1.13 Waste Management

Plant operations experience has demonstrated that the quality of the water received by the Project has required more processing over time, thereby producing more salt cake. The installation of a second brine crystallizer is expected to result in 9-16 cubic yards per day of non-hazardous salt cake, depending on the amount of dissolved solids in the water received. This increase will not significantly impact available landfills.

3.1.14 Worker Safety and Fire Protection

The installation of the second brine crystallizer will be consistent with conditions of certification in the Decision applicable to worker safety and fire protection.

3.2 Consistency of Amendment with the Certification and LORS

The CEC Siting Regulations require a discussion of the consistency of the proposed project revision with the applicable laws, ordinances, regulations, and standards (LORS) and whether the modifications are based upon new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision (Title 14, CCR Section 1769 [a][1][D]). If the project is no longer consistent with the certification, the petition for project change must provide an explanation for why the modification should be permitted.

Installing the brine crystallizer will result in higher water processing efficiency, which is consistent with the Decision and does not undermine the assumptions, rationale, findings or other bases of Decision

Similarly, this Amendment is consistent with all applicable LORS.

4.0 Potential Effects on the Public

Consistent with the requirements of the Commission Siting Regulations Section 1769 (a)(1)(G), this section addresses the proposed Amendment's effects on the public.

Installation of a second brine crystallizer will not adversely affect the public because it is a minor modification of facilities within the fenceline of the Project.

5.0 List of Property Owners

5.1 List of Property Owners

CEC Siting Regulations (Title 20, CCR, Section 1769[a][1][H]) require the project owner to provide to the Compliance Project Manager a list of all property owners whose property is located within 500 feet of the project. The Project site is owned by Tejon Ranchcorp and leased to the project owner, pursuant to an existing lease. Tejon Ranchcorp is also the property owner of all of the land located within 500 feet of the project.

5.2 Potential Effects on Property Owners

This section addresses potential effects of the project changes proposed in this Amendment on nearby property owners, the public, and parties in the application proceeding, per CEC Siting Regulations (Title 20, CCR, Section 1769 [a][1][I]).

As described in this Amendment, there will be no significant adverse environmental impacts from the brine crystallizer installation, in fact there will no impacts at all. All work to install the brine crystallizer will take place within the property boundaries of the Project site. Accordingly, the Amendment will have no effect on nearby property owners, the public and parties to the original application proceeding.