



CALPINE®

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April 17, 2009
OMEC-L-0672

DOCKET	
99-AFC-5C	
DATE	APR 17 2009
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Ms. Donna Stone
Compliance Project Manager
California Energy Commission MS -2000
1516 Ninth Street
Sacramento CA 95814

Reference: Otay Mesa Energy Center LLC
Project # 60004203

Subject: Docket No. 99-AFC-5C
Petition to Modify Condition of Certification HAZ-1

Dear Ms. Stone:

In accordance with the requirements of the California Energy Commission Siting Regulations Section 1769, Post Certification Amendments and Changes; the Otay Mesa Energy Center (OMEC) submits for your review 12 copies of the Petition to Modify Condition of Certification (COC) HAZ-1.

COC Haz-1 contains a list of hazardous chemicals (Table 3.4-7) which were expected to be on-site, based on the former owner's (PG&E) projections. This table no longer represents the quantities of several listed chemicals expected to be used at the OMEC facility. Therefore, a revised Table 3.4-7 is proposed in this Petition which will reflect the current anticipated quantities of chemicals, specifically Aqueous Ammonia and Hydrogen.

If you have any questions please give me a call at 619-661-3411.

Otay Mesa Energy Center LLC

Ed Merrihew
Compliance Manager

File: 5.3.4

c.c. Anita Tang
Dave Jordan
Mitch Weinberg

Rec'd 4/20/09 ds

Calpine-Otay Mesa Energy Center

Petition to Modify Condition of Certification: HAZ-1

99-AFC-5



April 2009

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1.1 OVERVIEW OF AMENDMENT

- The California Energy Commission (CEC) approved the Otay Mesa Generating Project (OMGP) (99-AFC-5) on April 18, 2001. Subsequent to the CEC’s approval of the project, Calpine Corporation (Calpine) purchased and now owns Otay Mesa Energy Center, Limited Liability Corporation (OMEC, LLC). OMEC, LLC is the project owner and party responsible for compliance with the Commission’s Conditions of Certification.

The purpose of this amendment is to petition the California Energy Commission (CEC) to change Condition of Certification HAZ-1; Appendix B (Table 3.4-7).

HAZ-1 reads: *“The project owner shall not use any hazardous material in reportable quantities, as specified in Title 40, CFR Part 355, Subpart J, section 355.50, not listed in Appendix B (Table 3.4-7) below, or in greater quantities than those identified by chemical name in Table 3.4-7, below, unless approved in advance by the CPM”*

VERIFICATION: *“In the annual Compliance Report to the CPM, the project owner shall provide a list of hazardous materials contained at the facility in reportable quantities”*

This amendment to the project contains information required pursuant to Section 1769 (Post Certification Amendments and Changes) of the CEC’s Siting Regulations. The specific project change and information needed to fulfill the requirements of Section 1769 are contained in Sections 1.0 through 7.0 of this Amendment. The key project change proposed is:

Change Condition of Certification –HAZ-1, Appendix B (Table 3.4-7) to reflect the revised list of anticipated hazardous chemicals, specifically Hydrogen, expected to be stored and used at the OMEC facility. The modified Haz-1 Appendix B, Table 3.4-7 is presented below as Table 3.4-7 Rev.1.

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1.2 OVERVIEW OF PROJECT CHANGES

The proposed change to Condition of Certification HAZ-1, Appendix B, **Table 3.4-7 Rev.1.** is needed to reflect OMEC's current list of hazardous chemicals expected to be stored and used on site, specifically Hydrogen, which was listed as 70,000 scf. The revised quantity is expected to be 120,000 scf.

Haz-1, Appendix B, Table 3.4-7 was originally developed by the previous owner PG&E. Since May 2007 OMEC began construction and has subsequently refined the anticipated chemical needs to successfully operate the plant. Therefore, a revised Haz-1, Appendix B, Table 3.4-7 is essential to remain in compliance with COC HAZ-1 and is presented below as Appendix B, Table 3.4-7 Rev.1.

1.3 SUMMARY OF ENVIRONMENTAL IMPACTS

Section 1769 (a) (1) (E) of the CEC Siting Regulations requires an analysis to address the impacts of proposed project modifications on the environment and the proposed measures to mitigate any significant adverse impacts. In addition, Section 1769 (a) (1) (F) of the Siting Regulations requires a discussion of the impact of proposed modifications on the facility's ability to comply with applicable laws, ordinances, regulations, and standards (LORS). Section 3.0 of this Amendment includes a discussion of the potential impacts of the proposed changes on the environment. It also includes a discussion of the applicability of existing and proposed mitigation measures, as well as a discussion of the consistency of the proposed modifications with LORS.

The proposed changes requested by OMEC, LLC in order to facilitate CEC staff approval of a revised HAZ-1, Appendix B, Table 3.4-7 will maintain compliance with COC Haz-1.

1.4 NECESSITY OF PROPOSED CHANGES

Section 1769 (a) (1) (B) and (C) of the CEC Siting Regulations requires a discussion of the necessity for the proposed modifications to OMGP and asks whether the modifications are based on information known to the petitioner during the Certification proceeding. The proposed modifications were not known to the petitioner during the Certification proceeding; Calpine acquired OMGC, LLC in July of 2001 approximately 3 months following Certification. The proposed project changes are needed to attain full compliance with Condition HAZ-1.

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1.5 CONSISTENCY OF CHANGES WITH LICENSE

Section 1769 (a)(1)(D) of the CEC Siting Regulations requires a discussion of each proposed project modification and asks whether the modification is based on new information that would change or undermine the assumptions, rationale, findings, or other bases of the CEC's final decision on the original AFC. An explanation of why the proposed changes should be permitted is also required.

The proposed modification does not undermine the assumptions, rationale, findings or other bases of the CEC's final decision on the original AFC. The modification is expected to provide continued compliance with the CEC Decision.

The proposed changes are summarized in Table 3.4-7 Rev.1.

SUMMARY OF PRINCIPAL PROJECT MODIFICATION

Modification Description	What Was Licensed	Proposed Modification	Rationale / Necessity
<u>HAZ-1 Appendix B, Table 3.4-7 Rev.1. modification to reflect anticipated hazardous chemicals and respective quantities of each to be stored and used on-site.</u>	HAZ-1 Appendix B, Table 3.4-7	Haz-1 Appendix B, Table 3.4-7 Rev.1.	Allows CEC staff to recommend approval of Table 3.4-7 Rev.1. modification and attains full compliance with Haz-1.

2.0 DESCRIPTION OF PROJECT CHANGES

2.1 INTRODUCTION

In compliance with CEC Siting Regulations Section 1769(a) (1) (A), this section of the Amendment includes a description of the proposed project modification, as well as a discussion regarding the necessity for the change.

2.2 PROPOSED PROJECT CHANGES

The proposed modification to Condition of Certification HAZ-1, Appendix B, Table 3.4-7 is presented below in an amended Table 3.4-7 "Rev.1".

3.0 ENVIRONMENTAL ANALYSIS OF THE PROPOSED CHANGES

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3.1 INTRODUCTION

Sections 1769(a) (1) (E) and (F) of the CEC Siting Regulations require that the following environmental information regarding proposed changes be addressed as part of any post-certification amendment:

- An analysis of the impacts the modifications may have on the environment and proposed measures to mitigate any significant adverse impacts (Section 1769(a)(1)(E))
- A discussion of the impact of the modifications on the facility's ability to comply with applicable LORS (Section 1769(a) (1) (F)).

The analysis is organized by environmental discipline in Sections 3.2 through 3.17. These disciplines are the same as analyzed in the original AFC. As applicable, each section addresses the proposed project change.

In summary, the proposed modification to the approved OMEC project will not impact the environment, the public, and the adjacent property owners.

3.2 AIR QUALITY

The project will still meet all applicable air quality standards and the Applicant will provide air quality offsets at the required level to fully offset project impacts. No unavoidable adverse significant air quality impacts are expected to occur due to the proposed project modification. The intent of the project modifications are to modify HAZ-1, Appendix B, Table 3.4-7 to reflect the current anticipated hazardous chemical storage and usage at the OMEC facility.

3.2.2 Regulatory Compliance

This section would typically list the applicable San Diego APCD rules and regulations. However, the proposed change to Condition HAZ-1 will not change the assessment of the SDAPCD rules and regulations as presented in the AFC

3.3 GEOLOGIC HAZARDS AND RESOURCES

The proposed modifications to the OMGP that are addressed in this Amendment do not change the assessment of geologic hazards and resources as presented in the AFC (Section 5.3).

3.4 AGRICULTURE AND SOILS

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The proposed project modifications that are addressed in this Amendment do not change the assessment presented in the AFC for agriculture and soils.

3.5 WATER RESOURCES

The proposed project modifications addressed in this Amendment do not change the assessment presented in the AFC for water resources.

3.6 BIOLOGICAL RESOURCES

The proposed project modifications addressed in this Amendment do not change the assessment presented in the AFC for biological resources.

3.6.1 Affected Environment

The proposed project modifications addressed in this Amendment do not change the assessment presented in the AFC for the affected environment.

3.6.2 Environmental Consequences

There are no direct impacts to biological resources from the changes associated with this amendment.

3.6.3 Mitigation Measures

The proposed project modifications addressed in this Amendment do not change the assessment presented in the AFC. This Amendment will modify the HAZ-1, Appendix B, Table 3.4-7 to reflect current anticipated hazardous chemical storage and use at the OMEC site.

3.7 CULTURAL RESOURCES

The proposed modifications to the OMGP that are addressed in this Amendment do not change the assessment presented in Section 5.7 of the AFC for cultural resources.

3.8 PALEONTOLOGICAL RESOURCES

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The proposed modifications to the OMGP that are addressed in this Amendment do not change the assessment presented in Section 5.8 of the AFC for paleontological resources.

3.9 LAND USE

The proposed modifications to the OMGP that are addressed in this Amendment do not affect the land use impact assessment presented in Section 5.9 of the AFC.

3.10 SOCIOECONOMICS

The proposed modifications to the project do not affect the socioeconomics assessment presented in Section 5.10 of the AFC.

3.11 TRAFFIC AND TRANSPORTATION

The proposed project changes do not affect the assessment of traffic and transportation presented in Section 5.11 of the AFC.

3.12 NOISE

The proposed modifications to the OMGP that are addressed in this Amendment do not affect the Noise impact assessment presented in Section 5.12 of the AFC.

3.13 VISUAL RESOURCES

The proposed modifications to the OMGP that are addressed in this Amendment do not affect the visual impact assessment presented in Section 5.13 of the AFC.

3.14 WASTE MANAGEMENT

The proposed modifications to the project that are addressed in this Amendment do not change the assessment of waste management in Section 5.14 of the AFC.

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3.15 HAZARDOUS MATERIALS HANDLING

The proposed modifications to the project that are addressed in this Amendment do not change the assessment of hazardous material handling in Section 5.15 of the AFC. Certain chemicals were deleted and others added to the Table such as Hydrogen which was originally presented in Table 3.4-7 as 70,000 scf. The revised total quantity expected on-site is approximately 120,000 scf (2600 pounds). Of this approximately 80,000scf will be in storage and approximately 40,000scf will be in use as coolant in CT's and STG.

3.16 PUBLIC HEALTH

The proposed modifications to the project that are addressed in this Amendment do not change the assessment of public health in Section 5.16 of the AFC.

3.16.1 Screening Health Risk Assessment

The proposed modifications to the project that are addressed in this Amendment do not change the Screening Health Risk Assessment in section 5.16 of the AFC and subsequent Screening Health Risk Assessments prepared for previous amendment packages.

3.17 WORKER SAFETY

The proposed project modifications do not affect the worker safety assessment presented in Section 5.17 of the AFC.

3.18 CUMULATIVE IMPACTS

The proposed project modifications do not affect the cumulative impacts assessment presented in Section 5.18 of the AFC.

3.19 LAWS, ORDINANCES, REGULATIONS, AND STANDARDS

Compliance with the applicable laws, ordinances, regulations, and standards (LORS) for the proposed project modifications will be accomplished by complying with the LORS identified in the OMGP AFC (Section 7.0) (99-AFC-5) and the CEC's Final Decision for the project.

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4.0 Proposed Modifications to Conditions of Certification

The following Table reflects Haz-1, Appendix B, Table 3.4-7 with proposed modifications reflected in strike out/ underline mode

In compliance with the requirements of the CEC Siting Regulations Section 1769 (a)(1)(A), the present section includes the proposed modification to Conditions of Certification (COCs) that would need to be reviewed and approved by the CEC concurrent with the CEC review of this Amendment. As part of this Amendment, OMEC, LLC is requesting that the CEC review the requests to revise the COC discussed herein.

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APPENDIX B

TABLE 3.4-7

ANTICIPATED HAZARDOUS CHEMICAL USAGE AND STORAGE¹

Material	Purpose	Usage/Day	Maximum Amount Stored	Storage Type
Neutralizing amine solution	Feedwater pH control	5.35 lb	800 gal	Portable vessel
Oxygen scavenger solution	Feedwater oxygen control	2.5 lb	800 gal	Portable vessel
Di-, tri-sodium phosphate solution	Boiler water pH/scale control	5 lb	800 gal	Portable vessel
Hydrochloric acid HCl	Chemical cleaning of HRSG	As needed	Temporary only	Portable vessel
Ammonium bifluoride-NH ₄ HF ₂	Chemical cleaning of HRSG	As needed	Temporary only	Portable vessel
Citric acid	Chemical cleaning of HRSG, feedwater systems	As needed	Temporary only	Portable vessel
EDTA chelant	Chemical cleaning of HRSG, feedwater systems	As needed	Temporary only	Portable vessel
Sodium nitrite NaNO ₂	Chemical cleaning of HRSG	As needed	Temporary only	Portable vessel
Diesel fuel oil	Diesel fire pump	0	400 gal	Tank, UL-C.S.
Sulfuric acid	WetSac pH control	520 lbs	1000 gal	Tank
Sulfuric acid for station batteries	Electrical/control building	0	600 gal	Battery
	Combustion turbine	0	732 gal	Battery
	Miscellaneous	0	100 gal	Battery
Hydrogen	Generator cooling	800 cu ft	70,000 120,000 cu ft	Tank, C.S.
Aqueous Ammonia-29.4 %	NOx abatement	127 lbs	16,000 qa	Tank

¹ All numbers are approxim:

² Aqueous Ammonia (19.5% solution) will be used if the SCR system alternative is used in place

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4.1 Proposed Modification to Condition of Certification: The following table reflects the proposed COC Haz-1 Appendix B Table 3.4-7 and is labeled as Rev.1.

APPENDIX B

TABLE 3.4-7 Rev. 1

ANTICIPATED HAZARDOUS CHEMICAL USAGE AND STORAGE¹

Material	Purpose	Usage/Day	Maximum Amount Stored	Storage Type
Neutralizing amine solution	Feedwater pH control	35	400 gal	Portable vessel
Oxygen scavenger solution	Feedwater oxygen control	2.5 lb	400 gal	Portable vessel
Di-, tri-sodium phosphate solution	Boiler water pH/scale control	5 lb	400 gal	Portable vessel
Citric acid	Chemical cleaning of HRSG, feedwater systems	As needed	Temporary only	Portable vessel
EDTA chelant	Chemical cleaning of HRSG, feedwater systems	As needed	Temporary only	Portable vessel
Sulfuric acid	WetSac pH control	520 lb	1000 gal	Tank
Sulfuric acid for station batteries	Electrical/control building	0	600 gal	Battery
	Combustion turbine	0	732 gal	Battery
	Miscellaneous	0	100 gal	Battery
Hydrogen	Generator cooling	800 scf	120,000 scf	Tank, C.S.
Aqueous Ammonia (29.4%)	Nox abatement	127 lb	16,000 gal	Tank, C.S.

¹ All numbers are approximate.

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5.0 Potential Effects on the Public

Consistent with the California Energy Commission Siting Regulations Section 1769(a) (1) (G), this section includes a discussion of how the proposed project modification affect the public.

The proposed amendment to Condition of Certification HAZ-1 will not impact the public.

6.0 Potential Effects on Property Owners

Consistent with the California Energy Commission Siting Regulations Section 1769(a) (1) (I), the following section addresses potential effects on nearby property owners, the public, and parties in the application proceedings.

The proposed modification to Condition of Certification HAZ-1 will not affect nearby property owners.

7.0 List of Property Owners

Consistent with the California Energy Commission Siting Regulations Section 1769 (a) (1) (H), this section lists the property owners adjacent to the proposed modifications.

The adjacent property owners around the OMEC plant site are:

<u>Assessor's Parcel No.</u>	<u>Owner</u>
648-040-20-00	Rancho Vista del Mar 5440 Morehouse Dr. San Diego, CA. 92121
648-040-11-00	Reflex Corp. 1825 Aston Ave. Carlsbad, CA. 92011
648-040-35;36;37-00	OMC Properties 5440 Morehouse Dr.

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San Diego, Ca. 92121

648-040-28-00 International Industrial Park
5440 Morehouse Dr.
San Diego, Ca. 92121

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