

MAMMOTH PACIFIC I REPLACEMENT PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

California Clearinghouse Number 2011022020

September 2012

CEQA Lead Agency:

Mono County
P.O. Box 2415
Mammoth Lakes, California 93546



MAMMOTH PACIFIC I REPLACEMENT PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

California Clearinghouse Number 2011022020

September 2012

CEQA Lead Agency:

Mono County
P.O. Box 2415
Mammoth Lakes, California 93546

Project Applicant:

Mammoth Pacific, L.P.
P.O. Box 1584
Mammoth Lakes, California 93546

CEQA Consultants:

CAJA Environmental Services, LLC and Environmental Management Associates, Inc.
588 Explorer Street
Brea, California 92821

MAMMOTH PACIFIC I REPLACEMENT PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

TABLE OF CONTENTS

TABLE OF CONTENTS	II
LIST OF FIGURES.....	III
LIST OF TABLES.....	III
LIST OF EXHIBITS	III
1 INTRODUCTION.....	1
1.1 Project Location	1
1.2 Summary of the Proposed Project	4
1.3 Environmental Review Process	4
<i>1.3.1 Draft Environmental Impact Report</i>	<i>4</i>
<i>1.3.2 Revised Draft Environmental Impact Report (RDEIR).....</i>	<i>5</i>
<i>1.3.3 Second Revised Draft Environmental Impact Report (RDEIR2)</i>	<i>5</i>
1.4 Use of the Document	6
2 RESPONSES TO COMMENTS.....	7
2.1 Responses to RDEIR Comments.....	7
2.2 Responses to RDEIR2 Comments.....	44
3 COMPILED REVISIONS TO THE DRAFT EIR	51
3.1 Revisions Resulting from Public Comments on the RDEIR.....	51
3.2 Clarifying Revisions to the Recirculated RDEIR2	54
3.3 Revisions Resulting from Public Comments on the RDEIR2.....	61
4 MITIGATION MONITORING AND REPORTING PROGRAM	63
4.1 Purpose.....	63
4.2 Adoption of Mitigation Measures	63
4.3 Monitoring and Reporting Procedures.....	63
4.4 Regulatory Code and Compliance Standards.....	63
4.5 Compilation of Mitigation Measures	63

LIST OF FIGURES

Figure 1: Project Location Map – Mammoth Pacific I Replacement Project Location2
Figure 2: Existing Casa Diablo Geothermal Complex and Proposed M-1 Replacement Plant Site.....3

LIST OF TABLES

Table 1: Inventory of Comment Letters Received on the MP-I Replacement Project RDEIR.....7
Table 2: Inventory of Comment Letters Received on the MP-I Replacement Project RDEIR2.....44

LIST OF EXHIBITS

Exhibit I: Comment Letters and Attachments on the Revised Draft EIR (RDEIR)

Comment Letter 1	Black Gold Asphalt, Inc.
Comment Letter 2	Doug Clair Construction, Inc.
Comment Letter 3	Molina Janitorial Services
Comment Letter 4	Thomas Petroleum, LLC
Comment Letter 5	Geothermal Institute of Mammoth
Comment Letter 6	Joy Engineering
Comment Letter 7	Town of Mammoth Lakes Community Development Department
Comment Letter 8	Lahontan Regional Water Quality Control Board
Comment Letter 9	Adams, Broadwell, Joseph & Cardozo, counsel representing California Unions for Reliable Energy (CURE)
Comment Letter 10	Ormat Nevada, Inc.

Exhibit II: Comment Letters and Attachments on the Second Revised Draft EIR (RDEIR2)

Comment Letter 11	Lozeau Drury LLP, counsel representing Laborers International Union of North America, Local 783 (LIUNA)
Comment Letter 12	Adams, Broadwell, Joseph & Cardozo, counsel representing California Unions for Reliable Energy (CURE)

Exhibit III: Unified Final EIR

MAMMOTH PACIFIC I REPLACEMENT PROJECT

FINAL ENVIRONMENTAL IMPACT REPORT

1 INTRODUCTION

In accordance with Sections 15088, 15089, and 15132 of the *CEQA Guidelines*, the Mono County has prepared this Final Environmental Impact Report (FEIR) for the Mammoth Pacific I Replacement Project (Project). This FEIR includes the following sections:

1. Introduction;
2. Response to Comments;
3. Compiled Revisions to the EIR; and
4. Mitigation Monitoring and Reporting Program (MMRP).

There were two revisions to the Draft Environmental Impact Report (Draft EIR or DEIR). Comment letters on the Revised Draft Environmental Impact Report (RDEIR) and the Second Revised Draft Environmental Impact Report (RDEIR2) are provided as Exhibit I and Exhibit II, respectively.

1.1 Project Location

The existing Mammoth Pacific Unit I (MP-I) project is a commercial geothermal development project operated by Mammoth Pacific L.P. (MPLP) and located near Casa Diablo Hot Springs in Mono County, California (see Figure 1). The existing MP-I project consists of a binary power plant with a design capacity of about 14 megawatts (MW), a geothermal wellfield, production and injection fluid pipelines, and ancillary facilities that have been operating since 1984. The existing MP-I power plant site is located approximately 1,200 feet northeast of the intersection of U.S. Highway 395 and California State Route 203 on 90 acres of private (fee) land owned by Ormat Nevada, Inc. (Ormat), the parent company of MPLP (see Figure 2).

The M-1 replacement plant site would be located entirely on private land about 500 feet northeast of the existing MP-I power generation facilities and immediately adjacent to the existing MP-II power plant. The Project would replace the existing MP-I power generation facilities. The Project would not change the existing geothermal wellfield or wellfield operations, and it would not change the amount of geothermal resource utilized by the existing Casa Diablo geothermal development complex; therefore, no adverse impact on the geothermal reservoir would occur as a result of the Project.

Mammoth Pacific I Replacement Project
Final EIR

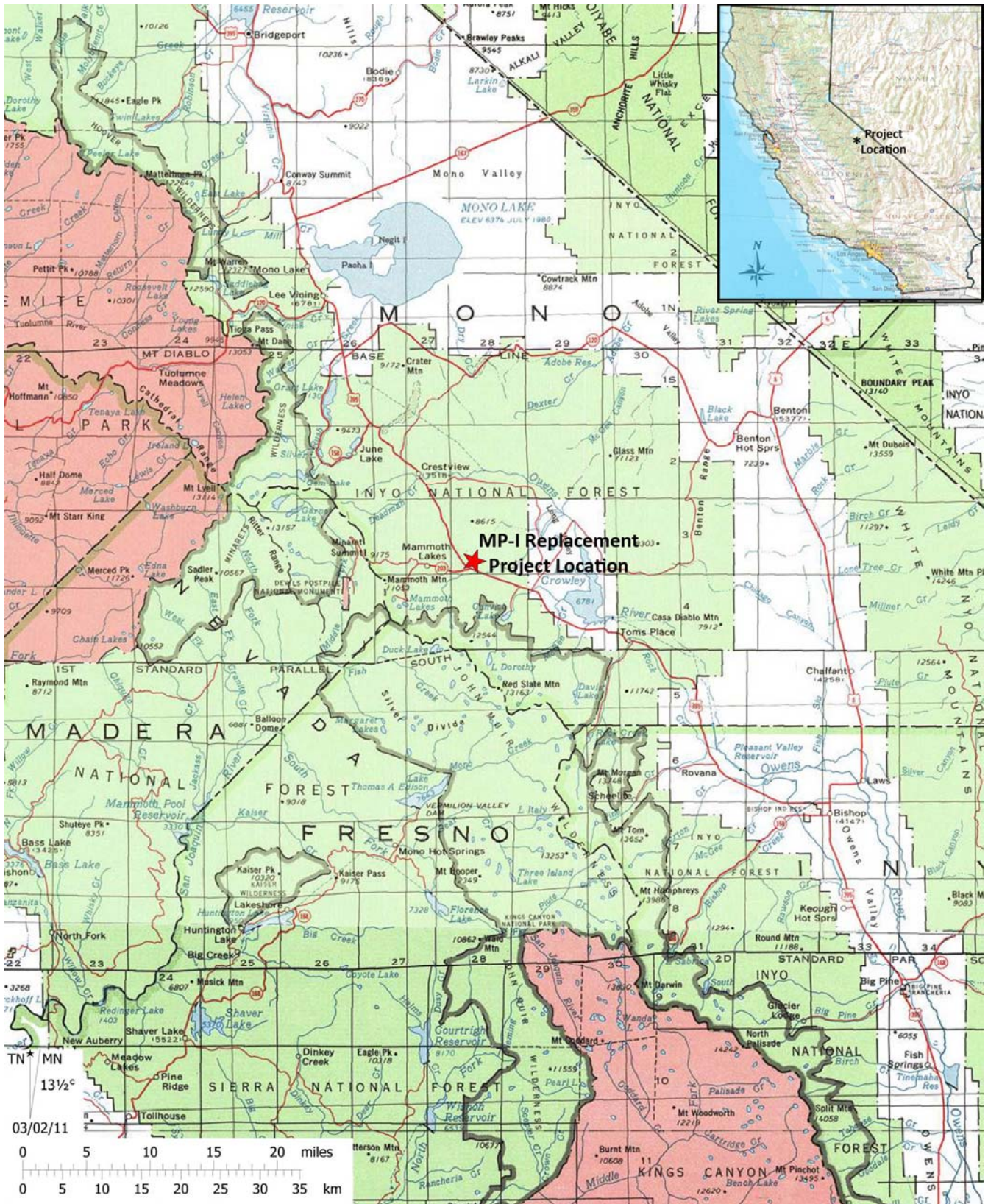


Figure 1: Project Location Map – Mammoth Pacific I Replacement Project Location

*Mammoth Pacific I Replacement Project
Final EIR*



Figure 2: Existing Casa Diablo Geothermal Complex and Proposed M-1 Replacement Plant Site

1.2 Summary of the Proposed Project

The Mammoth Pacific I Replacement Project (Project) was proposed by MPLP (Applicant) to replace the aging MP-I power plant with a new, more modern and efficient binary power plant (M-1) while maintaining the existing geothermal wellfield, pipeline system and ancillary facilities. The proposed M-1 replacement power plant would be capable of generating, on average, approximately 18.8 MW (net) of electricity. No net change in the rate of geothermal fluid produced and supplying the existing Casa Diablo geothermal development complex would result, and no substantive change to the geothermal reservoir is anticipated. During M-1 plant startup operations, the existing MP-I plant would continue to operate until the new M-1 plant becomes commercial, after which time MPLP would close and dismantle the old MP-I plant. The old MP-I plant site would be converted to an equipment storage area as part of the decommissioning process. The transition period during which both the MP-I and M-1 operations would overlap would be a period of up to two years from the date the M-1 plant begins startup operations.

1.3 Environmental Review Process

Following receipt of an application for a Conditional Use Permit for the Project from MPLP, Mono County prepared an Initial Study of the potential environmental effects of the Project, filed a Notice of Preparation (NOP) of the Draft Environmental Impact Report (DEIR) with the California State Clearinghouse and Planning Unit within the Governor's Office of Planning and Research (OPR) and distributed public notice of their intent to prepare an EIR for the Project. The notice was published in local newspapers on or about February 4, 2011. It was also distributed to responsible and trustee agencies and interested members of the public identified on the Mono County interested party list. A public scoping meeting for the Project was conducted on Thursday, February 17, 2011 with Mono County agency representatives and MPLP in attendance to answer questions. Mono County requested that written comments on the MP-I Replacement Project be received by March 7, 2011. Mono County received a total of two written comment letters on the Project following the public notice. Copies of these letters are on file with the Mono County Economic Development Department in Mammoth Lakes.

1.3.1 Draft Environmental Impact Report

As a result of the Initial Study, and comments received from responsible/trustee agencies and the public during scoping for the DEIR, the following environmental resource topics were identified for detailed environmental assessment.

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Noise

The Draft EIR was originally circulated for public review from July 13, 2011 to August 26, 2011.

1.3.2 Revised Draft Environmental Impact Report (RDEIR)

After review of comments made on the earlier DEIR, Mono County determined that significant new information was needed to address concerns expressed about the proposed Project. Under the California Environmental Quality Act (CEQA), recirculation of a Draft EIR is required when significant new information changes the EIR. As such, Mono County decided to revise and recirculate the Draft EIR to provide the public opportunity to review additional Project information provided by the Applicant; new baseline biological resources information; and supplemental documentation not provided with the earlier published Draft EIR.

A Revised Draft Environmental Impact Report (RDEIR) was prepared. The RDEIR provided Appendices A through L to support the document. The RDEIR substantially amended the earlier Draft EIR such that reviewers were invited to submit new comments on the RDEIR for written response in this FEIR. The previous comments received on the earlier Draft EIR remain part of the administrative record, but the previous comments do not require written response.

The RDEIR was made available to various agencies, citizen groups, and interested individuals for review. The RDEIR was circulated to state agencies for review through the State Clearinghouse of the Governor's Office of Planning and Research (OPR) copies of the RDEIR Notice of Availability (NOA) were also sent to interested individuals, groups and agencies. A shortened 30-day public review period for the Recirculated Draft EIR was requested and approved by the State Clearinghouse. The public review period began at 8:00 a.m. on Friday, February 24, 2012 and ended at 5:00 p.m. on Monday, March 26, 2012.

1.3.3 Second Revised Draft Environmental Impact Report (RDEIR2)

In response to a concern raised by a commenter on the RDEIR, the County proposed clarifying revisions to its General Plan to clarify the language of the Land Use and Conservation/Open Space Elements. In order to evaluate these proposed clarifications, a new Land Use/Planning section was added to the RDEIR to provide further assessment and clarification for public review and comment. This second RDEIR (RDEIR2) was recirculated to provide the public and interested agencies with the opportunity to review and comment on the supplemental information provided in the new Land Use/Planning section and the associated changes to the RDEIR. Except as noted in the RDEIR2, all of the other assessment provided in the earlier circulated RDEIR remains unchanged and the County sought only comments on the Land Use/Planning related assessment provided in the RDEIR2. Comments previously received on the RDEIR that pertain to other subjects have also been responded to and are addressed in this Final EIR, along with any agency/public comments on the RDEIR2.

The RDEIR2 included the insertion of a new Land Use/Planning section, Section 4.10, to the RDEIR with supplemental analysis of both the proposed MP-I Replacement Project and the potential cumulative impacts associated with existing and proposed development. Only the new Land Use/Planning section and the related changes to the text of the RDEIR were circulated for public review. All of the new or supplemental information to the RDEIR was analyzed as appropriate in various sections of the RDEIR2. The RDEIR2 provided Appendices M through O to support the document. The new or revised information included:

- Land Use/Planning Section 4.10;
- Cumulative Impact Land Use/Planning Section 5.3.10; and
- Assorted changes to earlier RDEIR text needed for document consistency with the added Land Use/Planning sections.

Office of Planning and Research (OPR) copies of the RDEIR2 Notice of Availability (NOA) were also sent to interested individuals, groups and agencies. A shortened 30-day public review period for the RDEIR2 was requested and approved by the State Clearinghouse. However, the County subsequently decided to extend the shortened review period to the normal 45-day public review period. The public review period began at 8:00 a.m. on Friday, July 6, 2012 and the extended 45-day public review period ended at 5:00 p.m. on Monday, August 20, 2012.

1.4 Use of the Document

The Final EIR allows the public and Lead Agency to review revisions to the RDEIR/RDEIR2, comments, and responses to comments before approval of the project. This FEIR (which includes the RDEIR and RDEIR2, incorporated by reference) will serve as the environmental document used by Mono County when considering approval of the Project. After completing the FEIR and before approving the Project, the Lead Agency must make the following three certifications (*CEQA Guidelines* Section 15090).

- The FEIR has been completed in compliance with CEQA;
- The FEIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the FEIR prior to approving the project; and
- The FEIR reflects the Lead Agency's independent judgment and analysis.

In addition, if an EIR that has been certified for a project identifies one or more significant environmental impacts, the Lead Agency must adopt findings of fact (*CEQA Guidelines* Section 15091[a]). For each significant impact, the Lead Agency must make one of the following findings.

- Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

Each finding must be accompanied by a brief explanation of the rationale for the finding. In addition, the Lead Agency must adopt, in conjunction with the findings, a program for reporting or monitoring the changes that it has either required in the project or made a condition of approval to avoid or substantially lessen impacts (*CEQA Guidelines* Section 15091[d]). These measures must be fully enforceable through permit conditions, agreements, or other measures. This program is referred to as the Mitigation Monitoring and Reporting Program (MMRP). An MMRP has been prepared for the Project and is provided in this FEIR (see Section 4, Mitigation Monitoring and Reporting Program).

In addition, when a Lead Agency approves a project that would result in significant and unavoidable impacts that are disclosed in the EIR, the agency must state in writing its reasons for supporting the approved action (*CEQA Guidelines* Section 15093[b]). This statement of overriding considerations must be supported by substantial information in the record, including the EIR. However, because the proposed Project would not result in any significant and unavoidable impacts which are not mitigated to below the level of CEQA significance, no statement of overriding considerations is needed for Project approval.

2 RESPONSES TO COMMENTS

The Draft EIR prepared for the MP-I Replacement Project was revised two times and each revised document was recirculated for public review. Public comments were received on both the Revised Draft EIR (RDEIR) and the Second Revised Draft EIR (RDEIR2) (see Exhibit I and Exhibit II, respectively). Responses are provided below to each set of public comments. The responses to the public comments on the RDEIR are provided in Section 2.1, and the responses to the public comments on the RDEIR2 are provided in Section 2.2, below.

2.1 Responses to RDEIR Comments

Mono County received a total of ten (10) comment letters on the RDEIR not including attachments. Table 1 lists the individuals and organizations that provided written comments on the RDEIR during the 30-day review period.

Table 1: Inventory of Comment Letters Received on the MP-I Replacement Project RDEIR

Comment Letter No.	Date	Individual	Organization
1	3/6/2012	Rick Gorges	Black Gold Asphalt, Inc.
2	3/6/2012	Doug Clair	Doug Clair Construction, Inc.
3	3/6/2012	Juan Molina	Molina Janitorial Services
4	3/6/2012	Jim McDade	Thomas Petroleum, LLC
5	3/8/2012	David Harvey	Geothermal Institute of Mammoth
6	3/12/2012	Eric Jones	Joy Engineering
7	3/23/2012	Ellen Clark	Town of Mammoth Lakes Community Development Department
8	3/30/2012	Jan M. Zimmerman	Lahontan Regional Water Quality Control Board
9	3/26/2012	Elizabeth Klebaner	Adams, Broadwell, Joseph & Cardozo representing California Unions for Reliable Energy (CURE)
10	3/26/2012	Ron Leiken	Ormat Nevada, Inc.

Each of the comment letters is provided in its entirety in Exhibit I to this Final EIR in the order in which the comment letters have been numbered in Table 1, above. Each comment or statement in the appended comment letters for which a CEQA response is provided have been identified within a red box and numbered in the sequence in which the respective comments appear in the comment letter. The following format was used to create a unique number for each comment submitted on the RDEIR:

Comment Letter # - Two-Digit Sequential Comment #

The following are the responses to comments made on the RDEIR. The responses identify: (a) each comment letter in the order in which the comment letters were numbered, and the names of the individual and organization that submitted the comment; (b) a summary of each identified comment; and (c) the CEQA response to the respective comment. Unless otherwise indicated, any references to appendices in this section refer to those appendices attached to the publicly distributed RDEIR.

Comment Letter 1: Rick Gorges, Black Gold Asphalt

Comment 1-01 Summary: The commenter supports the project.

Response to Comment 1-01: Comment Noted

Comment Letter 2: Doug Clair, Doug Clair Construction, Inc.

Comment 2-01 Summary: The commenter supports the project.

Response to Comment 2-01: Comment Noted

Comment Letter 3: Juan Molina, Owner, Molina Janitorial Services

Comment 3-01 Summary: The commenter supports the project.

Response to Comment 3-01: Comment Noted

Comment Letter 4: Jim McDade, Terminal Manager, Thomas Petroleum, LLC

Comment 4-01 Summary: The commenter supports the project.

Response to Comment 4-01: Comment Noted

Comment Letter 5: David Harvey, CEO, Geothermal Institute of Mammoth

Comment 5-01 Summary: The commenter objects to alleged abuses of the CEQA process by the California Unions for Reliable Energy (CURE).

Response to Comment 5-01: Comment Noted

Comment 5-02 Summary: The commenter supports the project and the use of local labor.

Response to Comment 5-02: Comment Noted

Comment Letter 6: Eric Jones, Joy Engineering

Comment 6-01 Summary: The commenter supports the project.

Response to Comment 6-01: Comment Noted

Comment Letter 7: Ellen Clark, Senior Planner, Town of Mammoth Lakes, Community Development Department

Comment 7-01 Summary: The Revised Draft EIR analysis and mitigation measures adequately address the potential environmental impacts of the project.

Response to Comment 7-01: Comment Noted

Comment Letter 8: Jan M. Zimmerman, P.G., Environmental Geologic, Lahontan Regional Water Quality Control Board

Comment 8-01 Summary: The commenter notes that the discussion of “jurisdictional waters” in the RDEIR describes the absence of waters, wetlands, or riparian habitat areas on the project site that qualify as jurisdictional resources with respect to the Army Corps of Engineers or CDFG. However, the commenter advises that all groundwater and surface waters are jurisdictional of the State.

Response to Comment 8-01: The commenter requests correction and clarification of a statement on Page 4-124 of the RDEIR. In accordance with this request, the language on Page 4-124 of the RDEIR under the heading “Jurisdictional Waters” has been revised as follows:

There are no waters, wetlands, or riparian habitat areas on the project site that qualify as jurisdictional resources with respect to the Corps or the CDFG. As noted above, a small, unnamed stream flows through the project site area between the existing MP-I plant site and the proposed M-1 plant site. No other streams or surface waters are located within the Project area, nor are there any cold springs, seeps or wet swales. All groundwater and surface waters in the project site area are jurisdictional waters of the State. In addition, the unnamed ephemeral stream that crosses the project site area may be a jurisdictional water of the U.S. To date, the Corps has not made a jurisdictional determination regarding this stream.

Additionally, the following environmental protection measure has been added to Page 4-126 of the RDEIR as Hydro Design Feature 6:

Hydro Design Feature 6: No element of the project construction shall result in the alteration of the blue-line drainage channel, or discharge of fill material into, the blue-line drainage channel that crosses the site between the existing MP-I and proposed M-1 plant sites, adjacent to Old Highway 395. Prior to commencement of construction, the Applicant shall provide to the County the proposed engineering design for the road crossing which demonstrates to the County that no impact to this drainage channel would occur as a result of project construction.

The commenter requests that the County require the Applicant to consult with the Corps regarding the jurisdictional status of the blue-line drainage crossing the site. However, the project as proposed would not alter this drainage, nor would it discharge fill or dredged materials to the drainage channel at any location within the project site. Thus, a jurisdictional determination by the Corps would be unnecessary. Similarly, no Streambed Alteration Agreement from CDFG would be necessary. The addition of Hydro Design Feature 6 would ensure that no impact to this drainage occurs as a result of the Project.

Comment 8-02 Summary: The commenter states that Hydro Mitigation Measure 1 describes installation of concrete headwalls and placement of permanent sluice gates within natural drainage channels of the site that are subject U.S. Army Corps of Engineers and CDFG requirements.

Response to Comment 8-02: The drainage control features described in Hydro Mitigation Measure 1 include existing head walls and sluice gates that are currently installed on the unnamed natural ephemeral drainage that passes between the existing MP-I plant and the proposed M-1 plant site. Other drainage control features would not be located within natural channels and thus would not be subject to state or federal fill/discharge regulations. The mitigation measure only requires the routine inspection and

maintenance of these existing head walls and sluice gates. No construction of new, or modification of existing, in-channel spill/drainage control features would occur as part of the Project.

Comment 8-03 Summary: The commenter states that Hydro Design Feature 3 identifies placement of silt fences within drainage swales at the exist point of the site to filter sediment during construction. The commenter states that silt fences are not effective sediment control best management practices (BMP) in areas of high water flow velocities.

Response to Comment 8-03: Comment acknowledged. Flow velocities in the drainage swales adjacent to the M-1 plant site are not expected to be high; however, the detailed mix of BMPs will be determined in the SWPPP. The selection of BMPs will take into account anticipated flow volumes and velocities at each location within the site. In addition, the SWPPP will require that all BMPs be regularly maintained and inspected before and after individual storm events. The measures included in Hydro Design Feature 3 are intended to represent examples of the types of BMPs that are expected to be utilized at the site.

Comment 8-04 Summary: The commenter states that the RDEIR does not describe long term BMPs that will be used at the equipment storage and staging areas to avoid erosion or other impacts to adjacent areas and surface waters.

Response to Comment 8-04: Long-term erosion control BMPs for the proposed equipment storage area to be located on the former site of the existing MP-I plant are described on Page 4-130 of the RDEIR. Hydro Mitigation Measure 2 requires that the spill containment and emergency response plans for the Project be maintained and implemented throughout the life of the Project. Specific spill control strategies and measures are also presented in the SPCC Plan for the existing MP-I plant, which is required to be modified and expanded to cover the proposed M-1 plant in HazMat Design Feature 3.

Comment 8-05 Summary: The commenter notes that a number of activities potentially associated with the Project could impact waters of the State, including: (a) land disturbance of more than one acre; (b) water diversion and/or dewatering activities; and (c) streambed alteration and/or discharge of fill material to a surface water. The commenter states the Project proponent should be advised of the permits that may be required.

Response to Comment 8-05: Comment acknowledged. No streambed alteration, fill material discharge to a natural streambed, water diversion, and/or dewatering is anticipated to be required during Project construction. However, the Project Applicant will be required to consult with the relevant agencies in the event that such actions are necessitated by changed circumstances.

Comment Letter 9: Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo, Attorneys at Law

Comment 9-01 Summary: The commenter provides a list of permits and other authorizations which the commenter states are required for the proposed Project.

Response to Comment 9-01: The commenter mentions the construction of an overhead transmission line. The “overhead interconnection transmission line option” presented in the DEIR was dismissed from consideration in the RDEIR and is not part of the proposed Project (RDEIR, page 1). A Mono County General Plan variance is required for the aboveground power line options proposed by the Project (RDEIR, page 1-3).

The commenter also states:

*Mammoth Pacific I Replacement Project
Final EIR*

Although not identified in the RDEIR, the Project also requires the County to amend the Mono County General Plan to authorize the Applicant to develop geothermal facilities within 500 feet of a watercourse within the Hot Creek Buffer Area.

Chapter 19.00 of the Mono County Code provides that all “use and development of private land within the unincorporated area” shall comply with requirements of the General Plan. Zoning or land development regulations, including the need for variances, are integrated into the General Plan. The Project is in the unincorporated area. Under the heading “Processing-Variance”, the General Plan at Page II-306 permits variances from “the provisions of the land use designations or land development regulations” when certain findings are made. The General Plan requirement cited by the commenter is a setback or classic land development regulation as has been determined by the County, from which a variance may be granted. It is noted in the RDEIR that the Applicant must obtain a variance to the Mono County General Plan Development Standards Chapter 15 Resource Extraction Designation for geothermal development to occur within 500 feet of a surface watercourse in the Hot Creek Buffer Zone on Pages 1-3 to 1-4, and page 3-4 of the RDEIR. The variance requirement is also noted in the Biological Resources (Page 4-52) and the Hydrology and Water Quality (Page 4-122) subchapters of the RDEIR.

The RDEIR2 (at pp. 33-35) evaluates proposed clarifying General Plan language concerning the 500-foot setback referenced in this comment. See also Response to Comment 12-02.

Comment 9-02 Summary: The commenter states that the RDEIR fails to (a) include a complete Project description; (b) provide legally defensible environmental baseline for wildlife resources, hydrological resources with the Project’s impact area, and intensity of geothermal power production in the Casa Diablo geothermal complex; (c) identify the Project’s conflicts with the Mono County General Plan; (d) fails to disclose and mitigate significant air pollutant emissions and impacts on vegetation depletion due to geothermal power production, mule deer, and land use; (e) fails to include an analysis of water supply impacts and adequate analysis of cumulative impacts with respect to air quality, mule deer, and thermal resources; and (f) violates CEQA prohibition on piecemealing environmental review.

Response to Comment 9-02: The commenter lists several purported deficiencies of the RDEIR, all of which are asserted to represent “fatal errors”, requiring that a new EIR be prepared and circulated again for public review. No support for any of these alleged deficiencies is presented in this comment. The RDEIR, in fact, provides a complete description of the Project in Chapter 2 (Pages 2-1 through 2-29). Appropriate environmental baselines, corresponding to actual conditions at the Project site as they existed at or near the time that the Notice of Preparation for the original DEIR (early 2011) was distributed, were incorporated into the analyses in the RDEIR. The Project’s need for a variance (which the commenter characterizes as an inconsistency with the Mono County General Plan) is disclosed and described on Page I-3 and I-4 of the RDEIR, Page 14 and 15 of the RDEIR2, and in Chapter 4.10 of the RDEIR2.

In addition, the Project’s air quality impacts are disclosed and evaluated in Subchapter 4.3 (Pages 4-36 through 4-48) of the RDEIR. The Project’s potential to affect vegetation die-off within the general vicinity of the Casa Diablo area is disclosed and evaluated on Page 5-11 of the RDEIR. The Project’s impacts on mule deer migration and habitat are disclosed and evaluated on Pages 4-65 through 4-67 of the RDEIR. The Project’s impacts on land use are disclosed and evaluated on Pages 3-3 and 3-4 of the RDEIR. The Project’s impacts on local water supply are disclosed and evaluated on Page 3-7 of the RDEIR. The Project’s contributions to cumulative impacts in the areas of air quality, mule deer, and thermal resources is disclosed and evaluated in Chapter 5 (Pages 5-1 through 5-18) of the RDEIR.

As discussed on Pages 1-4 and 5-4 of the RDEIR, the proposed MP-I Replacement Project and the Casa Diablo IV (CD-4) Project are independent of each other and are not part of the same proposal. If ultimately approved, each of these projects would proceed independently of the other and neither is

dependent upon the other for any aspect of its construction or future operation. As is appropriate, the CD-4 Project is evaluated as a cumulative project in Chapter 5 (Pages 5-1 through 5-18) of the RDEIR. Because the proposed MP-I Replacement Project would not depend upon the CD-4 Project, the RDEIR's treatment of the proposed CD-4 geothermal power plant as a separate project does not constitute "piecemealing". (See *Communities for A Better Environment et al v. City of Richmond, Chevron Products Company et al* (2010)).

The RDEIR analyzes the significant physical effects on the environment of the proposed MP-I Replacement Project. It does not, and is not required under CEQA, to analyze effects of the operations of other plants in the vicinity except as they may be relevant in the cumulative impacts analysis of the Project. The other operating projects in the area were approved after the required environmental analyses pursuant to CEQA and NEPA.

Further, while the comment does not provide evidence to support the assertions, it is understood that this is an introductory statement and that further elaboration is forthcoming in subsequent comments. The commenter is directed to Responses to Comments 9-05 through 9-29.

Comment 9-03 Summary: The commenter states that the County may not approve the Project until the Applicant: (a) demonstrates compliance with the Land Use and Conservation and Open Space Elements of the County General Plan; (b) document water supply entitlements for the Project demand; (c) prepares an analysis of the cumulative hydrologic and biologic impacts; (d) submits baseline hydrologic and biologic monitoring plans; and (e) prepares a baseline report of hydrologic and biologic resources.

Response to Comment 9-03: As discussed in the RDEIR (Page 3-7), the Project would not increase water consumption beyond existing levels associated with the MP-I plant. Water would be consumed on a temporary basis during Project construction activities, as discussed on Page 2-13 of the RDEIR. However, this water would be supplied to the site by construction contractors via water truck and would not represent an additional long-term demand upon local water supplies. To the extent that this water would be sourced from the Mammoth Community Water District (MCWD), an agreement between the construction contractor and MCWD for this water would be necessary and it is likely (though not certain) that reclaimed water would be provided for the dust suppression portion of the construction water demand, per Lahontan Regional Water Quality Control Board regulations governing allowable uses of reclaimed water (MCWD 2012).

In accordance with Action 6.2 under "Water Resources and Water Quality" in the County General Plan Conservation and Open Space Element, the Project is required to demonstrate to the County, prior to use permit issuance, that sufficient water exists to serve both domestic and fire flow needs of the Project and that use of the water will not deplete or degrade water supplies in the area, or adversely impact natural resources. As is discussed in the RDEIR, the Project would not generate additional fire flow or domestic water consumption demand beyond that which currently exists at the Project Site. Sufficient water supply exists to meet this current level of demand at the site; thus, sufficient water also exists to serve the domestic water and fire flow needs of the Project.

A written analysis of the cumulative hydrologic and biologic impacts of the Project and other existing and proposed projects within the Casa Diablo geothermal complex is included in the RDEIR (Chapter 5). Baseline descriptions of existing biologic and hydrologic resources are presented in Sections 4.4.2 and 4.8.2 of the RDEIR, respectively. Under Bio Mitigation Measure 1 and Hydro Mitigation Measure 3, both of which are required, the Project would be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the County General Plan.

While the comment does not provide evidence to support the assertions, it is understood that this is an introductory statement and further elaboration is forthcoming in subsequent comments. The commenter is directed to Responses to Comments 9-11, 9-12, 9-13, 9-16, 9-19, 9-21, 9-22, 9-28 and 9-29.

Comment 9-04 Summary: The commenter states that the comments were prepared with the assistance of identified technical experts, and directs the County to respond to comments from the respective technical experts provided as Exhibits to the comment letter.

Response to Comment 9-04: Comment Noted. See Responses to Comment Letters 9A, 9B, 9C and 9D. In those instances that the respective technical expert consultant comments are relied upon to support the commenter's comments, the County also utilizes the responses to those technical expert consultant comments to support the relevant responses to commenter's comments.

Comment 9-05 Summary: The commenter states that RDEIR fails to satisfy CEQA's purpose and goals.

Response to Comment 9-05: The commenter asserts that the RDEIR fails to satisfy several basic purposes of CEQA. However, no support for any of these deficiencies is presented in this comment. The RDEIR, in fact, provides a complete description of the Project in Section 2 (Pages 2-1 through 2-29). Appropriate environmental baselines, corresponding to actual conditions at the Project site as they existed at or near the time that the Notice of Preparation for the original Draft EIR (early 2011) was distributed, were incorporated into the analyses in the RDEIR. The RDEIR is based on existing, long-time operations of the plant to be replaced, the existing wellfield, and the existing ancillary facilities. That is the *existing environment*; that is the existing setting. The RDEIR analyzes the effects of the proposed Project on the existing environment, as is required by CEQA and pertinent case law. The commenter appears to ignore that the Project does not include an expansion of the wellfield, does not increase the use of the resource, and utilizes ancillary facilities already in place. *State CEQA Guidelines* section 15125 makes it clear that the baseline for the environmental analysis is the physical environmental conditions in the vicinity of the Project as they existed at the time the Notice of Preparation was published. Using this baseline, the analysis determines whether a given impact is significant.

The Project's air quality, biological resource, hydrology, land use, and water supply impacts, including any significant impacts, are disclosed and evaluated in these respective sections of the RDEIR and/or the RDEIR2.

While the comment does not provide evidence to support the assertions, it is understood that this is an introductory statement and further elaboration is forthcoming in subsequent comments. The commenter is directed to Responses to Comments 9-11 through 9-29.

Comment 9-06 Summary: The commenter states that the RDEIR project description is inadequate. The commenter specifically asserts that a description of the existing geothermal production and injection wellfield is needed and an illustration of the geothermal wellfield is required.

Response to Comment 9-06: As stated in the RDEIR (Page 1-1), "*The Project would replace the existing MP-I power generation facilities. The Project would not change the existing geothermal wellfield or wellfield operations, and it would not change the amount of geothermal resource utilized by the existing Casa Diablo geothermal development complex; therefore, no adverse impact on the geothermal reservoir would occur as a result of the Project ...*" As the wellfield is not part of the proposed Project, it is unnecessary to describe the existing wellfield or map any wellfield except where the proposed Project interconnects with the existing geothermal production and injection fluid pipelines. The interconnection pipelines are described in Section 2.13 of the RDEIR (Page 2-13 *et seq.*) and shown on Figure 10.

Comment 9-07 Summary: The commenter states that the description of the environmental setting is inadequate. The commenter specifically asserts that the RDEIR fails to provide adequate baseline for common wildlife species.

Response to Comment 9-07: The commenter states that the description of existing wildlife and habitat is limited to a list of common species. This is an inaccurate statement. The commenter overlooks the text description of the existing biological environment provided as Section 4.4.2 of the RDEIR (Page 4-43 *et seq.*) which includes the environmental setting, a description of the plant communities comprising the botanical habitat, and a description of the general wildlife and habitat that exists in and around the Project area. These discussions are elaborated upon in the baseline biological survey report appended to the RDEIR (Appendix D). The text of the RDEIR also includes an extended discussion of mule deer as requested by the CDFG during scoping for the EIR. No additional description of the environmental setting as it relates to common species is required.

Comment 9-08 Summary: The commenter also states that the description of the environmental setting is inadequate because the RDEIR fails to include baseline data on special status wildlife.

Response to Comment 9-08: Again, the commenter's assertion is inaccurate and overlooks the tabular assessment of the wildlife habitat in the Project area as it relates to each special status species identified as potentially occurring in the Project vicinity (see Baseline Biological Survey report provided as Appendix D to the RDEIR). The text of the RDEIR then provides a species by species description of the availability and quality of suitable habitat in the Project area for each of the special status wildlife species that could occur in the Project area (Page 4-67 *et seq.*). No additional description of the environmental setting as it relates to special status wildlife is required.

Comment 9-09 Summary: The commenter states that the RDEIR fails to provide baseline data on mule deer. The commenter then continues that the RDEIR discussion of mule deer use of the Project site is unsupported.

Response to Comment 9-09: The commenter's assertion that the RDEIR fails to provide baseline data on mule deer is inaccurate. As described in the RDEIR (Page 4 65 *et seq.*) both a site specific mule deer survey of the Casa Diablo area and an expanded mule deer survey which included the proposed CD-4 project area and mule deer habitat west of Highway 395 were undertaken under the direction of the CDFG, Mono County and the USFS. Current baseline information summarizing the current status of mule deer migration in the Eastern Sierra is described in the RDEIR. The RDEIR also summarizes the findings of the deer surveys by describing the mule deer habitat in Project area, mule deer use of the Project area, and mule deer movement through the Project area. All of these findings were supported by the baseline mule deer surveys and compiled information from earlier deer studies of the Project area and vicinity described in the Baseline Biological Survey report appended to the RDEIR (Appendix D to the RDEIR). No additional mule deer baseline information is required.

Comment 9-10 Summary: The commenter states that the RDEIR fails to include baseline data on federally endangered Owens tui chub.

Response to Comment 9-10: The RDEIR provides a thorough summary of the Owens tui chub (RDEIR, page 4-70 *et seq.*). There is no Owens tui chub habitat located in the Project area and the proposed Project would not result in any changes to the geothermal wellfield. As such, the proposed Project would have no potential for impacting offsite critical Owens tui chub habitat. However, the Project does include a mitigation measure which would change the existing MP-I Project conditions of approval by requiring the existing MP-I Project to adopt monitoring and contingent mitigation and remediation measures, if necessary, consistent Mono County General Plan requirements and other existing geothermal projects

located in the Casa Diablo area (see Bio Mitigation Measure 1, page 4-72). Accordingly, the Project provides additional protection to the Owens tui chub.

See also Response to Comment 9-16, below.

Comment 9-11 Summary: The commenter states that the RDEIR fails to provide adequate baseline for water resources.

Response to Comment 9-11: The commenter asserts that the RDEIR fails to describe both geothermal resource and surface water conditions in Mammoth/Hot Creek in a sufficient level of detail needed to present the “full environmental context” of the Project. However, a detailed discussion of the Project’s potential to modify the existing geothermal resource by altering injection temperatures is presented on Pages 4-130 through 4-133 of the RDEIR. This discussion includes the relevant geothermal resource baseline information needed for the analysis. As is stated clearly in the RDEIR, the Project would not alter existing rates of geothermal fluid production or injection. As such, the simple replacement of power generation facilities proposed by the Project would have no potential effect on the existing geothermal resources. Similarly, a detailed discussion of the observed decline in the thermal water component in the springs at the Hot Creek Fish Hatchery is provided on Pages 4-134 to 4-135 of the RDEIR. The data upon which these observations have been based are incorporated by reference into the RDEIR and mitigation required to address any potential existing or future Project-generated contribution to thermal decline at the Fish Hatchery springs is included as Hydro Mitigation Measure 3 in the RDEIR.

See also Response to Comment 9-16, below.

Comment 9-12 Summary: The commenter states that the RDEIR fails to establish a baseline for geothermal resource extraction. The commenter further states that because the existing MP-I plant is operating below maximum design capacity the County must assess whether the incremental increase in power production by the new M-1 plant would impact the area hydrology and biological resources.

Response to Comment 9-12: The proposed Project does not include any changes to the existing geothermal wellfield or geothermal production or injection activities. As described in Section 2.1.5 of the RDEIR (Page 2-17 *et seq.*), the existing production and injection wells supporting all of the Casa Diablo geothermal projects are operated as a system. The physical pumping capacity for all of the existing production wells is about 6,900,000 pounds per hour and there would be no change with the proposed Project. This is a physical limitation of the system regulated by the capacity of the production pumps and the productivity of the geothermal resource (see RDEIR, Appendix B). No change to the wellfield and pumping capacity of the geothermal resource is currently proposed. In any event, any such change would require additional approvals subject to NEPA and/or CEQA. As such, there will be no change in the potential for impacts on biological or hydrological resources compared to the existing conditions. No further assessment of geothermal resource extraction impacts is required. See also Responses to Comments 9-06, Comment 9-10, and Comment 9-11.

The RDEIR clearly states that neither the utilization of geothermal brine, the extraction of heat from the geothermal resource, nor the total amount of electrical power being produced at the existing Casa Diablo geothermal complex would increase as a result of the Project. Simply because the proposed M-1 plant, as a result of design and engineering improvements, is *capable* of increased power production, does not mean that more geothermal resource will be utilized by the Casa Diablo geothermal complex. As is noted in the RDEIR, existing power purchase agreements eliminate any incentive for the operator to generate more power than it can sell. See also Response to Comment 9-19.

Comment 9-13 Summary: The commenter states that the RDEIR fails to include an adequate land use baseline. The commenter specifically asserts that the RDEIR fails to disclose the Project conflicts with the Land Use and Conservation/Open Space Elements of the Mono County General Plan with respect to geothermal development within 500 feet of a surface watercourse in the Hot Creek Buffer Zone.

Response to Comment 9-13: The RDEIR fully recognizes that a variance from the General Plan will be required to locate the Project within 500 feet of a surface watercourse in the Hot Creek Buffer Zone (RDEIR, Page 1-3 and 1-4). See also Response to Comment 9-01 and the RDEIR, Table 4 on Page 1-8 and Page 3-4. The RDEIR2 (at pp. 33-35) evaluates proposed clarifying General Plan language concerning the 500-foot setback referenced in this comment. See also Responses to Comments 12-02, 12-03, and 12-04.

Comment 9-14 Summary: The commenter states that the RDEIR air quality impact analysis is inadequate. The commenter specifically states that the RDEIR fails to disclose the anticipated daily emissions of reactive organic compounds (ROG) during the up to two-year transition period when the existing MP-I plant and the M-1 replacement plant are both operating.

Response to Comment 9-14: The RDEIR states that, “[t]he net amount of geothermal resource utilized by the existing Casa Diablo geothermal development complex would not change as a result of any aspect of the Project either during the MP-I/M-1 transition overlap or after the MP-I plant operations are discontinued entirely and the M-1 plant is operating commercially” (Page 1-1). The fugitive emissions of motive fluid (ROG) emissions are expected to be proportional to the capacity at which each of the respective facilities is operating. This concept was understood by commenter’s technical air quality consultant as evidence by the consultant’s Comment 9D-09 in which the proportional ROG emissions at 50% capacity of the MP-I and M-1 plants are proportionally calculated to demonstrate the point the technical consultant was making. This means that at any time the M-1 plant is operating, even in reduced capacity, there will be a net improvement in diminished ROG emissions from the two combined sources during the transition period relative to the existing conditions. Further discussion of the concept and examples of these reduced net ROG emissions are shown in the proportional operating capacity examples provided in Response to Comment 9D-06.

Comment 9-15 Summary: The commenter states that the RDEIR’s conclusion regarding the significance of the Project’s air pollutant emissions is unsupported. The commenter states that the RDEIR relies on CEQA significance thresholds adopted by the Imperial County Air Pollution Control District (ICAPCD) and that operational ROG emissions which are equal to or exceed a rate of 55 lbs per day are significant. The commenter further asserts that, (a) the RDEIR does not require the Applicant to limit operation during the transition such that there is no net increase in ROG emissions; (b) the RDEIR does not provide documentation regarding the efficacy of the proposed emission control equipment; and (c) even with the Applicant’s claimed reductions in emissions, the ROG emissions will be significantly greater than the 55 lbs per day significance threshold.

Response to Comment 9-15: The commenter is incorrect. The RDEIR does not rely on the ICAPCD emission thresholds. The ICAPCD has no jurisdiction in the Project vicinity. As stated in the RDEIR the local regulating air district, the Great Basin Unified Air Pollution Control District, has not developed specific CEQA significance threshold for either project construction or project operations. The ICAPCD thresholds were provided for comparison purposes only to demonstrate to the public that the Project’s emissions would not be considered significant if the Project were to be constructed and operated within the jurisdiction of the ICAPCD. The commenter is also incorrect in the statement that the ICAPCD ROG emission threshold should be applied to the ROG emissions from the Project. The tabulated ICAPCD

project operations emissions threshold presented in the RDEIR were extracted from the ICAPCD CEQA Air Quality Handbook.¹ The ICAPCD handbook explicitly states:

For industrial development projects, the thresholds in Table 1 [Table 14 in the RDEIR] should be used only to determine significance of the impact from mobile source emissions attached to the stationary source. Therefore, Table 1 [Table 14 in the RDEIR] would not be used to determine the significance for the air emissions associated with the stationary source, including off-road mobile emissions within the stationary source.

The commenter's attempted use of the ICAPCD CEQA emission thresholds to allege significance of the fugitive stationary source ROG emissions from the Project is both inappropriate and technically incorrect.

- (a) As described in Response to Comment 9-14, the maximum rate of geothermal flow to the MP-I/M-1 plant sites during the transition period during which both the plants would be operating at reduced capacity is fixed to the maximum capacity of the geothermal production pumps. As such, there will be no net increase in geothermal production and the relative operating capacities of the two plants will be continuously proportional to the relative amount of the fixed geothermal production flow delivered to each plant; and therefore, there will not be any net increase in ROG emissions. See also Response to Comment 9-14 and Response to Comment 9D-06.
- (b) As described in Response to Comment 9D-05, it is assumed that "all losses" of n-pentane from the M-1 plant would result from fugitive emissions. This includes fugitive losses from the VRU regardless of the emission control efficiency of the VRU. This means that the estimated 205 pounds per day on average of fugitive emissions includes losses from numerous potential leak points including leak points associated with the VRU. Response to Comment 9D-05 also provides a description of the VRU.
- (c) As described above, the ICAPCD project operations ROG emissions threshold of 55 lbs per day is (i) not applicable in the GBUAPCD jurisdiction; and (ii) if the project was located in ICAPCD jurisdiction, the cited thresholds would only be applicable to mobile sources attracted to the proposed project stationary source and would not be applicable to air emissions associated with the stationary source itself. The proposed Project is subject to permit requirements of the GBUAPCD (RDEIR, page 4-38) for the binary geothermal power plant unit, but the Project does not conflict with or violate any of the CEQA air quality significance criteria set forth in the RDEIR (Page 4-39 *et seq.*). Further, even if the Project were located within the jurisdiction of the ICAPCD, the Project would not exceed the ROG emissions threshold cited by the commenter.

Comment 9-16 Summary: The commenter states that the RDEIR's biological impacts analysis is inadequate with respect to support for the conclusions regarding the Project's impacts on Owens tui chub. The commenter specifically asserts that: (a) the RDEIR lacks the baseline data on the Owens tui chub to support the significance of the Project's impacts; and (b) even if the maximum potential production and injection rates will not change as a result of the Project, the Project will increase power production above current rates.

Response to Comment 9-16: The Owens tui chub is singled out in the RDEIR for assessment as a potentially affected special status species (RDEIR, pages 4-70 to 4-72). The RDEIR explains that there is no Owens tui chub habitat in the Project area and that the potential for impact to Owens tui chub habitat is limited to possible changes that could occur to springs which support the species critical habitat near the Hot Creek Hatchery. The proposed Project will not change the existing geothermal wellfield or existing geothermal production or injection flow rates; and therefore, it can have no effect on the Owens tui chub.

¹ Imperial County Air Pollution Control District. 2007. *CEQA Air Quality Handbook*. November 2007.

The projected change in the power production that would result from the more efficient use of the geothermal resource by the proposed Project facilities will not change the geothermal resource production or injection flow rates; and as such, the Project can have no effect on the Owens tui chub.

The existing Casa Diablo geothermal resource development activities are monitored by the Long Valley Hydrologic Advisory Committee (LVHAC). Communications with representatives of the LVHAC were conducted during the environmental assessment of the Project, and it was determined that after more than 25 years of continuing geothermal resource utilization that only small changes have been observed in some of the Long Valley caldera springs and that no substantive impacts on the Hot Creek headsprings supporting the Owens tui chub critical habitat could be attributed to the existing geothermal development (RDEIR, page 4-71). The RDEIR also provides a mitigation measure which would require the existing MP-I Project, as modernized by the proposed MP-I Replacement Project power plant facilities, to adopt the same monitoring and remedial action plan requirements for protecting the Hot Creek headsprings and the Owens tui chub critical habitat supported by those headsprings as the County General Plan requires for new geothermal projects (RDEIR, pages 4-71 *et seq.*). This measure would provide additional protection of the Owens tui chub critical habitat that is not currently required for the existing MP-I project. The commenter provides no basis for the assertion that the Project could somehow adversely impact Owens tui chub.

Comment 9-17 Summary: The commenter states that the RDEIR’s biological impacts analysis is inadequate with respect to the significance of the Project’s impacts on vegetation depletion.

Response to Comment 9-17: The proposed Project will have no impact on the geothermal wellfield or the existing geothermal resource production or injection flow rates. As such, the Project cannot be contributory to the potential cumulative vegetation kill impact described in the RDEIR (Page 5-11). See also the expanded technical discussion in Response to Comment 9A-17.

Comment 9-18 Summary: The commenter states that the RDEIR’s biological impacts analysis is inadequate with respect to the significance of the Project’s impacts on mule deer.

Response to Comment 9-18: This comment confuses the different potential effects identified by Project-specific deer studies between those for resident deer and those for migratory deer. The argument presented in the first paragraphs restates a conclusion reached in the RDEIR regarding potential impacts upon *resident* deer. However, the commenter mistakenly assumes that this finding bears upon the “record” concerning *migratory* deer as stated in the second paragraph. It is important to identify potential impacts as precisely as possible if avoidance and mitigations are to be effectively applied to minimized potential impacts. The RDEIR analysis included the finding that resident and migratory deer would use the available resources differently, thereby avoiding the confusion expressed in this portion of the comment. The comment furthermore relies on extracting partial conclusions and a pre-study research question from reports that are describing studies conducted outside the Project area (to the west of U.S. Highway 395), and presents these extracts as conclusions stated about migratory deer use of the Project area. A more detailed response to this second type of confusion is presented in Response to Comment 9A 16, below.

The statement that the Project could potentially redirect migratory deer onto U.S. Highway 395 paraphrases a discussion point that was raised upon finding that deer currently use the movement corridor that will be potentially affected by the Project. This potential effect is disclosed in the RDEIR as a result of site-specific research, and possible outcomes including a worst case of increased mortality at U.S. Highway 395 are discussed, but this outcome alone does not support the commenter’s vague contention of “overwhelming” evidence that mule deer will be significantly impacted. The RDEIR analysis relies on knowledge of specific effects identified by the studies, using that information to formulate effective

measures to offset potential impacts. In this case measures are intended to reduce the potential adverse effects of partial closure of a movement corridor is provided in the RDEIR (Page 4-73, Bio Protection Measures 7 to 9).

Comment 9-19 Summary: The commenter states that the RDEIR’s conclusions regarding the Project’s impacts on geothermal fluid are unsupported.

Response to Comment 9-19: As is described on Page 4-131 of the RDEIR, the total amount of geothermal brine flow to the combined MP-II plant, PLES-I plant, and existing MP-I plant (collectively, the existing Casa Diablo geothermal complex) would not increase beyond the current geothermal fluid utilization with the implementation of the proposed Project. The commenter misstates the information presented on Page 4-131 of the RDEIR. The RDEIR does *not* state “geothermal production will...increase as a result of the Project”. Rather, the RDEIR explains (on Page 4-132) that the “physical limitation on fluid production for the complex has been, and will continue to be, the capacity of the production pumps and the productivity of the geothermal resource, neither of which would change as a result of the Project. The amount of heat removed from the fluid is determined by the production flow rate and the thermodynamic efficiency of each individual unit at the Casa Diablo geothermal complex. The fact that the proposed M-1 replacement plant unit has a higher output rating than the existing MP-I plant unit that it replaces does not mean that more total heat will be removed from the resource. With its more advanced design, for a given amount of heat extracted from the geothermal fluid, more electrical energy can be produced by the proposed M-1 plant unit than by a corresponding flow to the existing MP-I plant unit it would replace. The RDEIR also states (Page 4-132) “the increase in M-1’s output over MP-I’s output is due to increased efficiency and to its capacity to handle more flow than the existing MP-I plant; any increase in which would be offset by directly corresponding reductions in flow to MP-II and PLES-I.” Throughout this discussion, it is made clear in the RDEIR that neither the utilization of geothermal brine, the extraction of heat from the geothermal resource, nor the total amount of electrical power being produced at the existing Casa Diablo geothermal complex would increase as a result of the Project. The commenter appears to ignore statements in the RDEIR, which indicate that the proposed M-1 plant is capable of producing more power using the same amount of geothermal fluid because of design and engineering improvements over the old plant. The commenter also appears to ignore the discussion at Pages 4-131 through 4-138 of the RDEIR, as well as the limitations on production imposed by power purchase agreements. Simply because the proposed M-1 plant, as a result of design and engineering improvements, is *capable* of increased power production, does not mean that more geothermal resource will be utilized by the Casa Diablo geothermal complex. To the contrary, as is shown in the RDEIR, physical and other limitations would prevent that from occurring.

With respect to hydrologic impacts resulting from existing extraction/injection and the 2005 wellfield expansion, the existing MP-I plant utilizes the geothermal resource by extracting heat from the geothermal fluid and converting that heat into mechanical then electrical energy. This process does not consume the hydrologic resource; it only beneficially utilizes the heat from the geothermal fluid for electrical power generation purposes. The extracted water is injected back into the subsurface reservoir. Over time, the naturally hot subsurface environment reheats the returned fluid back into potentially extractable geothermal resource. There is negligible water consumed by the existing MP-I plant operations, and the proposed MP-I Replacement Plant Project plant operations would not change the negligible hydrologic resource consumption of the existing MP-I project.

Comment 9-20 Summary: The commenter states that the RDEIR fails to identify the Project’s conflict with Mono County land use requirements.

Response to Comment 9-20: The commenter is incorrect regarding the RDEIR’s assessment of the Project’s inconsistency with the Land Use and Conservation/Open Space Elements of the County General

Plan regarding required setbacks from watercourses within the Hot Creek Buffer Zone. As noted in multiple locations in the RDEIR (Page 1-3, Table 4 on Page 1-8, and Page I-3 and I-4), a variance from the applicable setback requirements for projects within the Hot Creek Buffer Zone will be required for the Project to allow development within 500 feet of a “blue-line” stream. The RDEIR2 (at pp. 33-35) evaluates proposed clarifying General Plan language concerning the variance from the 500-foot setback requirement referenced in this comment. Further, the commenter is incorrect in the assertion that the Project would require the County to amend its General Plan to authorize the development of geothermal power facilities within 500 feet of a watercourse within the Hot Creek Buffer Area. As noted on Page I-3 and I-4 of the RDEIR, the Project would only require a variance from the County Planning Commission for the necessary setback reductions to allow development within 500 feet of a “blue-line” stream within the Hot Creek Buffer Area. A General Plan amendment is not necessary.

See also Responses to Comments 9-01 and 12-02.

Comment 9-21 Summary: The commenter states that the RDEIR fails to include an analysis of the Project’s water supply impacts.

Response to Comment 9-21: As discussed in the RDEIR (Page 3-7), the Project would not increase water consumption beyond existing levels associated with the MP-I plant. The Project would not rely upon water supplied by the Mammoth Community Water District (MCWD) for its future operational needs. Thus, the standard of CEQA review specified in the *Vineyard* decision is not applicable to the Project’s operational phase. As noted in the RDEIR, water would only be consumed on a temporary basis during Project construction activities, as discussed on Page 2-13. Further, this water would be supplied to the site by construction contractors via water truck and would not represent an additional long-term demand upon local water supplies. However, in order to more fully explain this impact, the following discussion has been added after the second paragraph on Page 3-7 of the RDEIR:

Under the scenario that all of the water provided to the site by construction contractors would be procured from Mammoth Community Water District sources, a conservatively estimated 35,000 gallons of water would be required each working day over the course of the 8-month construction period to serve project needs, or a total of 5,600,000 gallons. According to the 2010 Urban Water Management Plan published by MCWD, total water demand in 2015 is projected to be 2,565 acre-feet per year (2,288,000 gallons per day). Therefore, the Project’s temporary water consumption would constitute approximately 1.5 percent of total anticipated demand. The MCWD estimates that 4,276 acre-feet per year of water will be available in 2015, or approximately 40 percent more supply than projected demand. The Project’s temporary water consumption would constitute approximately 0.9 percent of projected available supply. In addition, an agreement between the project construction contractor and MCWD for this water would be necessary and it is likely (though not certain) that reclaimed water would be provided for the dust suppression portion of the construction water demand in accordance with Lahontan Regional Water Quality Control Board regulations governing allowable uses of reclaimed water (MCWD, 2012). Given that project water consumption would be temporary and would not represent a long-term addition to existing MCWD water usage, this impact is less than significant.

Comment 9-22 Summary: The commenter states that the RDEIR discussion of cumulative impacts is inadequate.

Response to Comment 9-22: While the comment does not provide evidence to support the assertions, it is understood that this is an introductory statement and further elaboration is forthcoming in subsequent comments. The commenter is directed to Responses to Comments 9-23 through 9-26.

Comment 9-23 Summary: The commenter states the RDEIR fails to include an adequate analysis of the Project's cumulative impacts on air quality and public health. Specifically, the commenter asserts that the cumulative impact analysis did not consider the ROG emissions from all existing, proposed and reasonably foreseeable projects.

Response to Comment 9-23: As described in Section 5.1 of the RDEIR, all of the existing, proposed and reasonably foreseeable projects identified by the commenter were considered in the cumulative impact analysis. Specifically, the cumulative impact analysis considers those geothermal binary power plant projects with continuing ROG emissions of motive fluids (MP-I, MP-II, PLES-I and CD-4 projects) (RDEIR, page 5-10). The wellfield and pipeline projects are not continuing sources of ROG emissions. The proposed MP-I Replacement Project would result in a net reduction in ROG emissions relative to the existing MP-I project. As such, the MP-I Replacement Project would actually decrease and not increase the projected cumulative ROG emissions. The commenter provides no argument to substantiate the assertion of an inadequate public health cumulative impact analysis.

See also Response to Comment 9D-09 and Response to Comment 9D-10.

Comment 9-24 Summary: The commenter asserts that the RDEIR fails to include an adequate analysis of the Project's "cumulatively considerable" ROG emissions.

Response to Comment 9-24: As described in Response to Comment 9-23, above, the Project would actually decrease the existing ROG emissions and not increase the cumulative ROG emissions. The commenter relies on the analysis of a technical consultant as the basis for the assertion that the cumulative ROG emissions are considerable. The technical consultant's assessment that the cumulative emissions of ROG from the combined binary geothermal projects are cumulatively considerable is faulty. The corresponding responses to the comments of the technical consultant are provided in Responses to Comments 9D-09 and 9D-10.

Comment 9-25 Summary: The commenter states the RDEIR fails to address the Project's cumulatively considerable impacts on mule deer.

Response to Comment 9-25: CEQA compliance requires use of the best available information when identifying potential impacts that may occur. Based upon the results of site-specific studies of deer movements, consultation with local agency deer experts, and literature review including the Monteith et al (2009) report that is alluded to by the commenter; the only potentially significant effect identified was the partial closure of a corridor used by deer for movement during the normal periods of residency and migration in 2011. The RDEIR fully disclosed this finding, and presents mitigative and protective measures to reduce this potential effect to below the level of significance. The RDEIR analysis did not conclude that the removal of 1.6 acres of weed-dominated Big Sagebrush Scrub habitat would have the population-level effects invoked by exacerbation of nutritional limits. Based upon the magnitude of deer use measured and location of the corridor amid the Casa Diablo geothermal development complex, and upon the degraded status of the plant communities that will be disturbed, there is no basis for an RDEIR conclusion that landscape-level patterns of resource use would be affected by the Project. The RDEIR states a different conclusion regarding this effect at the larger scale of the cumulative foreseeable development of geothermal resources: that patterns of deer movement and potential affects upon movement corridors must be evaluated and subjected to monitoring as directed by the County of Mono and approved by the CDFG. Adoption of Bio Cumulative Bio Mitigation Measure 1 will require that such

monitoring be implemented as details of the foreseeable projects become available, applying the knowledge gained at the small scale of the Project to the larger scale of future developments. It is at this larger scale that the type of potential effects that the commenter questions will be detectable if they occur.

The mule deer habitat directly impacted by the existing and reasonably foreseeable projects totals about 62 acres (RDEIR, Page 5-7). Some of the habitat affected by the projects was already impacted by historical development in the Casa Diablo area (RDEIR, Subchapter 4.5) and by forest roads and recreational development in the wellfield area west of Highway 395 before the respective projects were constructed. The total cumulative impact area of 62 acres represents a tiny fraction of the available mule deer habitat and forage available to migrating deer in the Project vicinity. In addition, each of the existing projects proposed since the initial MP-I project was developed has been required to conduct project-specific mule deer surveys and implement mitigation measures to reduce the adverse effects of the respective projects on mule deer and mule deer movement (see environmental documents incorporated by reference in the RDEIR, Page 1-4). Additional mule deer surveys have been performed for the proposed CD-4 project and additional measures to reduce the adverse effects of that project on mule deer are reasonably expected to be required by the authorizing agencies for that project. Further, implementation of the Cumulative Bio Mitigation Measure 1 provided in the RDEIR (Page 5-1) would require future projects to prevent creating obstacles to wildlife movement through the Casa Diablo area. With the implementation of Cumulative Bio Mitigation Measure 1, the cumulative impact on mule deer is not considered significant.

Comment 9-26 Summary: The commenter asserts that the RDEIR fails to address the Project's cumulative impacts on thermal resources.

Response to Comment 9-26: Contrary to the commenter's assertion, the RDEIR did evaluate the potential cumulative impact of the proposed Project in concert with the other existing (MP-II and PLES-I) and proposed (CD-4) geothermal power plants within the Casa Diablo complex, as well as the related infrastructure (see RDEIR Section 5). Under CEQA, a project must only mitigate its contribution to a cumulatively considerable impact resulting from a combination of existing and proposed development. Section 15130(a)(3) of the *State CEQA Guidelines* states "a project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."

With respect to thermal resources, the proposed Project would be required to implement Cumulative Hydro Mitigation Measure 1. This measure would, as discussed in the RDEIR (Page 5-17), require the new M-1 plant, as well as the other existing and proposed plants in the Casa Diablo complex, to implement all applicable hydrologic and biologic monitoring and remedial action program requirements intended to identify and reduce potential existing and future impacts on these resources resulting from operation of the geothermal power plants. As discussed in Section 4.8 of the RDEIR, the proposed Project itself would not result in any change to existing utilization of the geothermal resource, with the exception of a slightly warmer (3°F) injection temperature. The increase in the number of production wells referenced by the commenter would be entirely associated with the CD-4 project. Additional measures designed to mitigate the impacts resulting from these additional wells would be identified in the EIS/EIR being prepared for that project by the U.S. Forest Service.

Comment 9-27 Summary: The commenter states the RDEIR violates CEQA's prohibition on piecemealed review.

Response to Comment 9-27: Each of the neighboring geothermal developments comprising the Casa Diablo geothermal complex (MP-I, MP-II and PLES-I) is a separate project capable of independent operation. The projects share some common facilities to facilitate efficient utilization of the geothermal

resource; however, none of the projects relies on any of the other projects. Each of the three projects was independently developed and approved at different times and by different regulatory authorities. The MP-II project operates under the regulatory oversight of Mono County; while, the PLES-I project operates under the regulatory oversight of the Bureau of Land Management and U.S. Forest Service. The existing MP-I project was owned by a different entity and permitted six years before the MP-II and PLES-I projects, and the MP-I project operates under different Mono County permit conditions than the MP-II project. Each of the projects has a different and separate power sales agreement which could change independent of the other projects, and each of the projects could be sold to a third party independently from the other projects.

The proposed CD-4 project is both physically separated from the other Casa Diablo geothermal complex projects and similarly independent of the other projects. The CD-4 Project is evaluated as a cumulative project in Chapter 5 (Pages 5-1 through 5-18) of the RDEIR. Because the proposed MP-I Replacement Project would not depend upon the existing MP-II or PLES-I project or the proposed CD-4 Project, the RDEIR's treatment of the proposed MP-I Replacement Project as a separate project does not constitute "piecemealing." Finally, if ultimately approved, each of these projects would proceed independently of the other and neither is dependent upon the other for any aspect of its construction or future operation.

See also Response to Comment 9-02.

Comment 9-28 Summary: The commenter states the County may not approve the Project until the Applicant demonstrates compliance with the Mono County General Plan.

Response to Comment 9-28: The commenter presents a list of ways in which the Project has purportedly failed to comply with applicable components of the County General Plan, including (a) water supply; (b) cumulative impacts; (c) monitoring; (d) baseline data; and (e) setbacks. The following are responses to the respective ways listed by the commenter.

- (a) With respect to water supply, in accordance with Action 6.2 under "Water Resources and Water Quality" in the County General Plan Conservation and Open Space Element, the Project is required to demonstrate to the County, prior to use permit issuance, that sufficient water exists to serve both domestic and fire flow needs of the Project and that use of the water will not deplete or degrade water supplies in the area, or adversely impact natural resources. As discussed in the RDEIR (at Page 2-13), the Project would place a temporary demand upon local water sources during the construction period in which water would be required for both potable use and dust suppression. See Response to Comment 9-21 for a discussion of this impact. As discussed in the RDEIR (at Page 3-7), operation of the Project would not create any additional water demand at the site over the long term for domestic or fire flow purposes. The Project would not modify the existing fire suppression system in place at the site other than to relocate it from the existing MP-I plant to the new M-1 plant. As is currently the case, geothermal fluid would be used for fire flow. No increase in fire flow would occur. Thus, sufficient water exists to serve Project needs and use of this water would not deplete, degrade, or adversely impact water supplies or natural resources.
- (b) With respect to cumulative impacts, the required written analysis of cumulative hydrologic and biologic impacts of the proposed Project and other development projects is contained in Section 5 of the RDEIR and relevant appendices.
- (c) With respect to monitoring, the RDEIR identifies two mitigation measures (Bio Mitigation Measure 1 and Hydro Mitigation Measure 3) that require the Project to implement applicable hydrologic and biologic monitoring requirements and resulting remedial action measures. If the County approves the Project, these mitigation measures would be adopted as conditions of approval.
- (d) With respect to baseline data, the RDEIR summarizes and references the baseline hydrologic and biologic resources data required by the County General Plan Conservation/Open Space Element.

Under an existing cooperative agreement between the U.S. Geological Survey (USGS) and the County, hydrologic resources monitoring has been conducted and data has been collected on a regular basis by the USGS. These data are summarized annually by the LVHAC, which coordinates and provides oversight of hydrologic and biologic monitoring within the Casa Diablo geothermal complex and Hot Creek vicinity.²

- (e) With respect to setbacks from blue-line streams within the Hot Creek Buffer Zone, see Responses to Comments 9-01 and 9-20 as well as the RDEIR2, pp. 33-35 and Response to Comment 12-02.

Comment 9-29 Summary: The commenter states that the Mono County General Plan cannot be amended by a variance.

Response to Comment 9-29: The RDEIR states that a variance is required for the Project to allow geothermal development to occur within 500 feet of a surface watercourse in the Hot Creek Buffer Zone. The commenter asserts that contrary to the RDEIR, a general plan cannot be amended by a variance under the County Code.

See Responses to Comments 9-01 and 9-20, RDEIR2 pp. 33-35, and Response to Comment 12-02.

Comment 9-30 Summary: The commenter (a) concludes that the RDEIR fails as an informational document; (b) summarizes the assertions of the RDEIR shortcomings presented earlier in the comment letter; (c) states the RDEIR must be withdrawn and a revised Draft EIR prepared; and (d) asserts that the County may not approve the Project until the Applicant modifies the Project to comply with the County General Plan.

Response to Comment 9-30: Comment noted. See Responses to Comments 9-01 through 9-29 and 12-02 and RDEIR2 pp. 33-35.

Comment Letter 9A (Exhibit A to Comment Letter 9): Scott Cashen, M.S., Senior Biologist – Letter Dated March 23, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo

Comment 9A-01 Summary: The commenter states that two deer studies are inadequate to provide an estimate of baseline use of the Project area by deer.

Response to Comment 9A-01: The RDEIR incorporates by reference published literature pertaining to mule deer habitat requirements, recent grey literature describing Round Valley Herd and Casa Diablo Herd resource use and movement, information gathered in consultation with biologists locally practicing deer management of these same herds, and on interpretation of the results of four Project-specific field studies of current (spring and fall 2011) deer use and movement within and around the site of the proposed Project. The goal of field studies was to improve upon the existing anecdotal and radio-collar research that could only confirm that resident deer and migratory deer do use the general area at some level during the period between spring and fall migrations. An important consideration therefore was that the design of field studies should yield more precise knowledge about where and when these uses are likely to occur. To this end, biologists from the California Department of Fish and Game and the U.S. Forest Service were asked to aid in developing the methodology applied, and this input and oversight was considered very helpful in meeting research goals.

² Note: The most recently compiled LVHAC data summary (2012) submitted to Mono County by the U.S. Geological Survey (USGS) and the joint funding agreement among the USGS, BLM and Mono County were attached as Appendix M and Appendix N to the RDEIR2, respectively.

Comment 9A-02 Summary: The commenter states that the deer studies and RDEIR fail to disclose a decrease in deer migration from Round Valley to the west side of the Sierra Crest or to discuss the importance of the Project site to maintaining migratory processes by the Round Valley deer herd.

Response to Comment 9A-02: The proposed M-1 facility will remove up to 1.6 acres of Jeffrey Pine Forest and up to 1.9 acres of Big Sagebrush Scrub that remain in the area between the existing MP-I and MP-II/PLES-I power plants. The RDEIR concludes these amounts of habitat loss are small in the context of the regional setting, because both community types are common and widespread. In our review, no connection was found between the disturbance of 5.7 acres and the choices ultimately made by migratory deer as they move across the available expanse of the Sierra Nevada, at least with regard to the choice of summer migration to West Slope versus the East Slope destinations. While there is merit in the commenter's observation that the causes and implications of large-scale shifts in the migratory patterns of economically important wildlife resources are not adequately known, it overinflates the goal of appropriate analysis in this case. The appropriate scale for analysis is the one applied in the RDEIR. That is, rather than projecting Project habitat removal to its potential impact upon the general phenomenon of migration, the analysis strove to determine whether and how replacing partial closure by a pipeline rack (of a movement corridor found to be used by deer during residency and migration) with partial closure by a replacement power plant would affect deer moving there. At this level of analysis, it was possible to formulate mitigations based upon recent Project-specific deer use data rather than speculation. Mitigations and Protection Measures addressing potential impacts attributable to the Project include reduced vehicle speeds, dog leash rules, preservation and avoidance of future disturbance within a known movement corridor located between the existing geothermal development complex and Casa Diablo Scarp to the east, and a dedicated new crossing of the pipeline rack in a position likely to be used by deer. It would not be possible or appropriate to attempt to formulate mitigations that would affect deer movements across the expanse of the Sierra Crest.

Comment 9A-03 Summary: The commenter states that neither of the two recent deer studies conducted in the Project area were conducted in the spring and therefore the analyses in the RDEIR are based on incomplete information and that impacts to deer in spring cannot be assessed.

Response to Comment 9A-03: The commenter is correct in that neither of the two deer studies relied upon was conducted during the period associated with spring migration of the Round Valley and Casa Diablo deer herds. Of the four (4) Project-specific studies used in the RDEIR analysis, MACTEC (2011) was the only study that was conducted during a portion of the period in question. As is characteristic of wildlife behavioral research, collection of more data would be thought of as an improvement for answering questions, lending more assurance of arriving at the correct answer. However, in this case, there is only one movement corridor that can be affected and, therefore, there is no possibility of seasonal variation in migratory routes. The Project would be located at an already constrained central position within the Casa Diablo geothermal development complex (see Figure 32, RDEIR Page 4-60). Because there is a single corridor available, the contention that the locations of spring and fall movement can vary is incorrect. Furthermore, the existing environment of this corridor includes constant noise and human use of the MP-I power plant that forms the west edge of the corridor and the MP-II/PLES-I power plants that comprise the east edge of the corridor. It also includes partial blockage by a pipeline rack. These existing effects are likely to affect deer movement, and in 2011 were associated with data showing relatively light deer usage in comparison to surrounding less disturbed habitats. These existing effects do not vary seasonally, and there is no basis for suspecting spring migrants would respond differently than fall migrants to environmental constants. It is reasonable to conclude that neither the location nor the magnitude of seasonal movements vary significantly within the 5.7-acre Project area and adjacent movement corridor.

Comment 9A-04 Summary: The commenter states that the way “transects” were selected and their alignments have a potentially confounding effect on results.

Response to Comment 9A-04: Project-specific studies and deer track studies by nature are indeed unique in that particular transects unique to each landscape are chosen for application of the repeated measurements protocol. Because measurements are repeated in a series over the time period of interest (in this case, 31 data collection “runs” were made using the same set of transects), the transects chosen for study must be reliable, must sample the affected environment as completely as possible, and must be amenable to dragging to create the tracking surface for the next day’s run. Transects aligned in a direction perpendicular to the presumed direction of migration would presumably provide clearer evidence of movement location and magnitude. The commenter correctly states that Transect GG is the only transect oriented in a direction that is presumably parallel, rather than perpendicular, to the primary direction of movement during migration, an assertion that can be validated by viewing the transect maps found in the methods section of each Project-specific survey report (see also RDEIR, Appendix D, Figure 7, page 26). As can be seen in these figures, Transect GG is a short transect that passes through the existing gap in the pipeline rack that extends between existing MP-I and PLES-I/MP-II facilities. The chosen alignment of transect GG is the only alignment available that is reliable, that is amenable for the repeated samples design of the research (and possible future monitoring), and that samples the entire habitat currently available for deer movement in this part of the landscape between MP-I and PLES-I/MP-II. Transect orientation would be irrelevant for measuring deer use of a narrow pipeline gap. Because Transect GG was intended to sample the available gap for movement, and did so completely, the goal to document deer use of this potential movement corridor was attained.

Comment 9A-05 Summary: The commenter states that statistical comparisons between transects, across time, or the interaction thereof, cannot be made with the data presented. The commenter recommends the assistance of an applied statistician to improve data comparisons.

Response to Comment 9A-05: The comment is made somewhat difficult to address due to its internal inconsistency. On the one hand, the assertion is first made that the type of deer track data as collected *cannot* be treated statistically to answer questions about deer movements. Later on, criticisms and suggestions are made regarding how certain statistical methods were not or should be applied to these same data. We agree with the second of these opinions, that the Project-specific deer studies data are, after all, quite suitable for statistical analyses. Clearly, the proffered statement that repeated measures data sets, including the robust data sets amassed in support of the RDEIR analysis cannot be treated statistically is not correct. The statistical processing that would be chosen depends upon the specific question(s) being asked of the data, and the data would be routinely transformed (for example, to standardized units such as the “tracks encountered/transect unit/survey day” suggested by the commenter) as appropriate. In the context of monitoring deer use, this is likely to be done for comparisons between data sets, for example to detect year-to-year changes in the mean deer use index generated by sampling the proposed Project area. The data presented in support of the RDEIR analyses are baseline data and therefore were not used for comparison, and were not transformed for comparisons as requested by the commenter. However, they are available for meaningful comparisons when the need arises. The potential need for additional monitoring of deer movements was considered during development of the protocol used for baseline deer use data collection. With faithful protocol duplication, comparative study of baseline and future monitoring results can be performed with statistical rigor.

Comment 9A-06 Summary: The commenter states that because the deer study transects, and specifically transect GG, were not established randomly and that those inferences can only be applied to the roads and not the entire study area.

Response to Comment 9A-06: As discussed in Response to Comment 9A-04, above, Transect GG was located specifically with the goal of sampling the movement through the only gap in an existing pipeline rack. This gap was of interest because it was identified as a potential wildlife movement corridor during on-site development of study methodology with the aid of recognized mule deer expert, Tim Taylor, CDFG wildlife biologist, and because it is located adjacent to where the M-1 facility would be built and operated. The interpretation of Transect GG data, therefore, was not based upon an arbitrary conclusion as alleged by the commenter, rather it was placed in the only manner available (through the gap.) The choice to use the SCE easement for Transect GG assured that the Transect was reliable for long-term repeated measurements (and possible monitoring in the future), that is could be dragged for creating the next day's tracking surface, and that is was utile for completely measuring use of deer by this particular corridor.

Comment 9A-07 Summary: The commenter asserts that the deer tracks detected in the study area is only an index of deer use and may not accurately reflect the number of deer using the study area. Further, the data cannot be used to support the author's conclusion that the main use of the Project area by deer is as a movement corridor.

Response to Comment 9A-07: The comment presents a discussion of why the track count data collected in support of the RDEIR analysis cannot be used to determine whether a potential deer movement corridor will or will not be affected by the proposed project. In support this contention, the commenter quotes from the Biological Assessment (Paulus, 2011, p. 24) and a site-specific deer use study conclusion that deer primarily use the habitat within and adjacent to the Project site as movement corridor. *Movement corridor* is a relatively general term, which by definition is intended to encompass directional migratory movement as well as the movements associated with local resident deer (e.g., nightly movement to water). The stated intent of the Project-specific research was to index movement, rather than distinguish between classes of movement types. The commenter's concerns about suspected bias and assumptions require a relatively detailed conclusion about *movement types* that was not stated in either the interpretation that a *movement corridor* occurs, or in the quote extracted by the commenter. Rather, the more general conclusion of use primarily for movement was reported, and the index of track crossings counts was given in support.

The conclusion that deer use this area primarily as a movement corridor was included in the RDEIR analysis. This conclusion relied upon all of the available data, including the vegetation surveys conducted in preparation for the proposed Project's environmental documentation. The Project would remove up to 5.7 acres of potential habitat for deer use. The vegetation studies found that, in contrast to the scrub and forest habitats widely available within the Casa Diablo area, the Project site vegetation as potential habitat for deer use is currently degraded or is absent. The most common plant species present within the project area is *Bromus tectorum*. This noxious weed and other non-native species form up to 100% of the plant cover. In addition, all remnants of the plant communities within the Project limits have become isolated due to prior habitat disturbance, including fencing and the ongoing operations of adjacent Casa Diablo geothermal energy facilities.

In order to clarify the completeness of the RDEIR's analysis leading to this conclusion that deer use of the Project site is primarily as a movement corridor, the third sentence of the first paragraph on page 4-66 of the RDEIR has been revised to read as follows:

However, the findings of the M-1 plant site specific deer survey ~~determined and botanical~~ survey results, and inspection of the existing configuration of the geothermal development complex, indicate that the main use of the existing MP-I Project area by deer is as a movement corridor.

The data collected to assess deer use of the Project area provides an index. These data are not an absolute count, so the report is able to conclude only that *some portion* of the movement recorded during the period October 4 to December 6 appeared to be attributable to deer migration. This finding is based upon changes observed in the pattern of deer movements over repeated measurements across the periods traditionally viewed as prior to regional migration and during regional migration. We concur with the commenter that migratory movements would likely be occurring in concert with movements of resident deer, as the prior study had confirmed the presence and use of the project area by deer prior to the recognized period of migration. However, the method of separating these classes suggested in this comment cannot be endorsed. It is possible that deer in the Bay Area move about randomly, as the commenter suggests. However, in the area of the proposed Project, the cited studies showed that deer use certain areas more frequently for movements, and these movements are associated with specific deer trails in the Project area to connect off-site cover, forage and watering areas. Tracks were followed to these trails, as documented and mapped in each report. In the final sentence of this comment, the commenter does appear to admit that answering their demand for data separating migratory from resident movement on a track by track basis is in fact not possible, and we appreciated their understanding that track count data are in this manner inherently limited.

Comment 9A-08 Summary: The commenter states movement by deer to water should not be the only movement of concern and that it is unclear how the referenced deer study concluded that movement to water was the main reason deer were using the study area.

Response to Comment 9A-08: The commenter is concerned about the attention given to nightly movements to water in the report for the project-specific deer migration study, and questions the conclusion that movement to water was the primary reason deer were using the Project area. Upon review of the report questioned by the commenter, we find the author makes no such conclusion. However, the hypothesis that movements through the area may be in large part to reach water on a nightly basis is brought up in the discussion sections of reports generated by two other deer studies conducted in the Casa Diablo area. Assuming the commenter intended to state the “conclusion” as a way of raising the question of why some deer choose to use the area between existing power plants as a movement corridor, the concern as stated will be addressed as possible. Discussion sections in the technical reports for the project-specific surveys were offered by the study author in order to aid the anticipated analysis of potential project impacts. Likely explanations for patterns in behavior indicated by the data were thereby made available for making informed changes to the Project design and formulating mitigative and protective measures. Movement to water, offered as an important reason for movement in and around the proposed project area, has been hypothesized based upon: (1) the lack of high quality forage and cover resources in the project area, at least in comparison to resources widely available elsewhere in the Casa Diablo area; (2) the finding of the botanical surveys conducted for the Project that surface water features are generally lacking throughout much of the period when deer potentially use the Casa Diablo area, the exception being the perennially available flows of Mammoth Creek; (3) the knowledge gained from pre-survey consultation with biologists from the CDFG and USFS who are tasked to monitor and manage deer herds in the Mammoth Lakes area; (4) communication with these same biologists as data became available for interpretation; and (5) findings during track surveys that movements through and around the Project area were associated with trails that led to Mammoth Creek.

Comment 9A-09 Summary: The commenter states that interpretation of the results of the deer studies is inhibited by (a) inconsistent use of terms, (b) omission of statistical methods, and (c) an inadequate description of the study methodology.

Response to Comment 9A-09: The three complaints stated by the commenter will be addressed in turn.

Regarding statement (a) – It should be noted that the footnote does not quote from any of the reports included in the Draft EIR analysis. The footnote formatting may lead to such a misreading. The point made by the commenter may be to support the contention that the terms “resident” and “migratory” and “residency” are used in a confusing manner, although examples are not provided. A review of the technical reports in question uncovered no examples supporting this claim. Given the definitions are provided in the introductory portions of each report and then used consistently, and that these terms convey commonly understood and useful meaning, no change to the RDEIR is warranted.

Regarding statement (b) – Statistical treatment appropriate to the data collected and the questions asked of these data was included in the analysis. The statistics applied were descriptive, including index means and standard deviations, as is appropriate for summarizing baseline data that is being used to describe the existing environment and judge the potential for the project to cause environmental impacts. The statistics applied were similarly appropriate for data that may be used in comparisons (with statistical treatments for comparing means, etc. applied) should future monitoring studies be performed using the same transects.

Regarding statement (c) – The assertion belies the detailed criticisms previously stated by the commenter (see Comments 9A-01 through 9A-08), and fails to recognize that these previous comments were made using the very different theme that flaws in the project-specific studies were made apparent by examining the *details* of the study timing, design, and methodology. We have responded in the spirit that all of the concerns as expressed can and should be addressed, and have made changes to the RDEIR as appropriate. The commenter’s prior interpretations and questions regarding the study results are detailed and thoughtful, and so we cannot agree with the commenter’s apparent conclusion that they could not be considered “meaningful”.

Comment 9A-10 Summary: The commenter states that the study methods used for the baseline deer survey were so poorly stated that the study could not be replicated for additional deer monitoring studies.

Response to Comment 9A-10: This comment makes the general assertion that the methods of the deer track count studies were not adequately described. What is not transparent? As noted in Response to Comment 9A-09, once again no examples are given in support of the commenter’s vague statement. As stated in Response to Comment 9A-01, the methods were developed in great detail with the assistance of local CDFG and USFS biologists. An important input that was incorporated into the research design was that consistent methodology be employed throughout the study. Methods that were agreed upon by the research and agency biologists were detailed in the “Methods” sections of each of the reports that were subsequently produced. The methods as described are internally consistent, and are consistent between reports. Each report includes a figure and accompanying text description of the transects selected, the sampling interval and method, and the data processing applied. These methods were intentionally written in clear wording and avoided use of jargon, in order to facilitate potential future replication if additional surveys are to be conducted for comparative purposes, for example when post-project monitoring of deer movements between and around the geothermal energy facilities is performed.

Comment 9A-11 Summary: The commenter states that the RDEIR does not make reference to or describe the goals of the CDFG deer management plans; and therefore, the commenter could not independently assess the Project’s compliance with Mono County General Plan.

Response to Comment 9A-11: The Mono County General Plan’s Conservation/Open Space Element indicates that the Project location falls within the Hot Creek Buffer Zone and the Hot Creek Deer Migration Zone. The General Plan’s Goal 1 Objectives B (requirement for permit conditions to reduce environmental impacts to below the level of significance) and E (policy with respect to impacts on a Deer Migration Zone) apply to the Project. This nexus was disclosed and discussed in the RDEIR (pp. 4-50 to

4-53). As the commenter observes, the applicable Mono County standard prohibits permitting a project that would conflict with CDFG policies regarding management of the Round Valley or Casa Diablo herds. Because the Project must comply with all Mono County policies before the County can issue a permit for the Project, and given the Project will require such a permit, the Project will comply with local CDFG policy regarding deer management.

Comment 9A-12 Summary: The commenter states that the RDEIR lacks the basis for extrapolating the conclusion that the proposed M-1 plant site would not substantially change the use of the movement corridor for resident deer between the existing MP-I plant site and the MP-II/PLES-I plant sites to how migratory deer may respond to the change.

Response to Comment 9A-12: The commenter extracts and discusses a conclusion reached by the author of a site-specific deer study regarding use of the post-Project environment by *resident* deer. The implications of this conclusion are discussed in the RDEIR, and we agree that it is appropriate to consider resident deer separately from migratory deer when the potential for impact upon the existing movement corridor is assessed and mitigations and protective measures formulated. Research on deer movements that was conducted within and around the site of the proposed Project indicates that prior to the normal period of fall migration, resident deer movements occur in close proximity to existing operations, noise and activity created by the Casa Diablo geothermal development complex. Deer trails leading to Mammoth Creek that were mapped in 2011 pass closely outside the fenced power plants immediately to the west and east of the proposed Project site, consistent with the known behavioral pattern of attenuation to environmental constants. The author of a subsequent study that occurred during the normal period when *migrating* deer may be present found that use of the movement corridor that will be affected by the Project was often zero on sampled nights, but did occur, and so concluded that the corridor is likely also used by migrating deer. There was no subsequent attempt in the RDEIR to generalize the identified impact (partial corridor closure) to lump resident and migratory deer into a single issue. Rather, as demonstrated by the two quotes the commenter cites, these classes of deer movement were explicitly considered as separate issues. Briefly, the RDEIR analysis recognizes fundamentally that behavior which would attenuate avoidance of power plant operations reasonably cannot be assumed for migratory deer that are encountering the existing operations and the existing partial closure of the movement corridor at an interval of once or twice per year only. Adaptation is reasonably assumed (and supported by data) for resident deer that choose to pass through on a nightly basis. As explained in the RDEIR, mitigation and protective measures including the construction of a dedicated ramp to decrease between-facility corridor blockage centrally, and the complete protection of a relatively undisturbed movement corridor identified immediately east of the complex, are designed to recognize and reduce the potentially greater impact to migrating deer to below the level of significance.

Comment 9A-13 Summary: The commenter states that the RDEIR conclusion that the Project would not have a significant impact on mule deer movement through the Casa Diablo area is not supported by the observation that deer could be redirected to the west of MP-I fencing and then possibly onto U.S. Highway 395.

Response to Comment 9A-13: The commenter extracts a quote from the RDEIR to demonstrate a significant impact upon deer will occur. We stand behind the questioned excerpt because it demonstrates the level of analysis used to judge whether impacts would occur to deer movements. As discussed in the same RDEIR section from where this quote is taken, the analysis appropriately included “worst case” scenarios. In this case, the formulation of mitigation measures to reduce the possible impact to below the level of significance led directly from recognizing that one possible outcome is increased vehicular collisions where U.S. Hwy 395 approaches within 1/2 mile of the Project. One measure in particular, Biological Protection Measure 8, requires the construction of a ramp in a central, relatively dark and tree-screened area of the Casa Diablo geothermal development complex. This ramp is intended to facilitate

wildlife crossing of an existing barrier, a pipeline rack that now (pre-Project) nearly closes the movement corridor in question (see RDEIR Fig. 32, p. 4-60). Its projected utility is based upon the findings of the 2011 deer studies that constructed crossings of this type in the Basalt Canyon area are regularly used by deer during both the residency and migratory periods. But most importantly, the new crossing will be sited in a landscape position such that any deer redirected westward by the Project will encounter the added passage within the same movement corridor, well before approaching Highway 395. Deer redirected to the west would also then pass and could choose to use the remainder of the existing movement corridor, including the trail identified at the gap created by Old Highway 395. To reach the four-lane U.S. Highway 395, redirected deer must choose to pass through the control center parking lot, then between facility fences and through the gate by using the MP-1 site approach road, and cross the existing fumarole fields and the unvegetated Casa Diablo wellfield, all prior to reaching the highway edge. The existing pattern of site usage indicates that deer moving through the central portion of the geothermal development complex use either the SCE easement gap or the Old Highway 395 gap. Tracks of deer exiting westward from the highly constrained area along the MP-1 approach road were not detected. Trails created by repeated movements westward toward the Highway were not found during searches. The goal of Protection Measure 8 is to offset a rather unlikely worst case by providing a dedicated crossing that will increase the overall utility of the existing, currently used movement corridor. The example given by the commenter demonstrates net benefit to deer movements and does not point out any potentially significant impacts that were omitted from the analysis.

Comment 9A-14 Summary: The commenter cites research done on mule deer habitat selection during development of a natural gas field and resulting indirect losses of habitat. The commenter then states that the RDEIR does not analyze the indirect consequences of deer being displaced to potentially less suitable habitats as a result of the Project.

Response to Comment 9A-14: The Project does not add a wellfield or any well pads as implied by the comment. The Project will not make any large-scale incursions into otherwise undisturbed habitat, which is the situation described in the published report cited by the commenter. The discussion point that the commenter excises from another 2011 deer study is quoted out of context and was taken from the discussion section of a report of research conducted in the area of the proposed CD4 Project, and it is not based upon data collected at Casa Diablo. The quote is offered in support of the commenter's contention regarding habitat fragmentation, but more appropriately should be considered within its context as part of a discussion elaborating upon some findings concerning whether existing pipelines located entirely to the west of U.S. Highway 395 could serve as barriers to deer movement to Mammoth Creek west of Highway 395 and to Murphy Gulch (Murphy Gulch is a seasonal water source approximately 1 mile to the west of the Project site.) The RDEIR for the M-1 Replacement Power Plant Project concludes that, based upon the small project footprint, lack of high quality deer forage and cover resources within the 3.5 acres of remnant native vegetation that will be removed, and mitigations that will reduce a potential impact to movement to below the level of significance, no large-scale habitat removal or isolation will occur and none of the population-level effects listed by the commenter will occur.

Comment 9A-15 Summary: The commenter cites a literature review of the effects of residential development on mule deer winter range in the Rocky Mountains (Polfus 2011) as evidence that even small amounts of development can significantly affect mule deer migrations.

Response to Comment 9A-15: The Polfus (2011) review cited by the commenter includes a wide spectrum of research results from many habitats and project situations. However, the RDEIR utilized project-specific research and information compiled on local deer herds, deer movement and deer use of the project vicinity to assess the potential effects of the Project on deer migration. Prior to deciding on the methodology that was used for the surveys of the Project site and surrounding habitats which were conducted in 2011 by Paulus, a systematic evaluation of the best available information was undertaken,

including: (a) review of published and grey scientific literature; (b) interviews with local CDFG and USFS biologists and researchers; and (c) careful examination and consideration of public and agency comments received during the CEQA scoping process. One research goal was to study when and to what degree the potential migration corridor between the existing MP-I and MP-II/PLES-I power plants would be impacted by the Project, again this being identified in part through consideration of literature similar to (but not including) the review cited by the commenter. The site-specific studies that were analyzed to form the RDEIR's conclusions regarding movement corridor impacts provided data that satisfy the research goal and that are clearly the best available information. This data is far superior to data collected in different habitats and situations. The RDEIR analysis used published literature as a guide but then relied upon the best available data to arrive at the stated conclusion that there is a potential for impact. The RDEIR presents the mitigations that will reduce the Project-specific potential impact to movement to below the level of significance. Targeted mitigation based upon the measured use of the potentially affected movement corridor has a greater assurance of meeting success criteria and avoiding significant impact than would vague mitigation presented to somehow address the wide spectrum of results found in published literature.

Comment 9A-16 Summary: The commenter states that conclusions in the RDEIR are unsupported by conclusions made by the Applicant's deer expert. Excerpts from the deer studies are provided that the commenter states are evidence that the Project will cause potentially significant impacts on mule deer.

Response to Comment 9A-16: The contention that the Applicant's deer expert concludes the statements quoted in the comment, and thereby the RDEIR conclusions are unsupported, is simply untrue. Statements that are listed are for the most part excerpted from the introductory and discussion information presented at the beginning or near the end of the deer study reports used in the analysis. The comment is misleading in that it purports to present conclusions based upon the data collected within and around the Project site, when it is actually excerpting from the stated intentions of the research to be performed at the Project site, or from discussions of research outcomes obtained in habitats and situations outside the Project area. Excerpt #1 is taken from a discussion of how pipelines in the Basalt Canyon area west of U.S. Highway 395 could potentially affect deer movement there. Excerpt #2, taken from the same report, discusses how the data collected in 2011 at the Basalt Canyon area west of U.S. Highway 395 show that deer use that area in a particular pattern, and therefore some of the specific potential impacts identified in the introduction to that report are plausible. Excerpt #4 is taken from a discussion of whether some deer may attempt to overwinter in the Casa Diablo area, a discussion written during the fall season that gives various reasons including the one cited why research to document possible winter use would be warranted. Reading of the entire passages shows that the concerns or goals stated in these reports are not equivalent to conclusions. Excerpts 3, 5, and 6, while quoted incorrectly due to being taken out of context, are more appropriately characterized as conclusions made by the deer expert regarding potential impacts associated with the Project. All three support the RDEIR conclusion that the Project will result in partial closure of a movement corridor, and are directly reflected in the mitigative and protective measures presented in the RDEIR.

Comment 9A-17 Summary: The commenter states that the Project will result in potentially significant impacts on trees kills and wildlife. This comment is based upon data collected and reported by USGS researchers. The commenter states that (a) the RDEIR does not accurately disclose the relationship between the project and tree kills; (b) the RDEIR statement that a cause and effect relationship has not been established is misleading; and (c) information presented in the RDEIR conflicts with information published by the USGS.

Response to Comment 9A-17: The commenter argues that because tree-kill areas have been correlated with existing geothermal operations that the Project would contribute to additional tree kills over its

30-year operational life. While thoroughly described in the RDEIR, it appears necessary to restate some factors central to the RDEIR analysis that appear to have been overlooked by the commenter:

- The existing MP-I Project is comprised of an operating geothermal power plant and wellfield.
- The proposed MP-I Replacement Project would only replace the power generation equipment used by the MP-I Project but it would have no direct or indirect impact on the wellfield.
- No new or additional geothermal resource production or injection activity is associated with the proposed MP-I Replacement Project;
- If the MP-I Replacement Project is not approved by the County, then the existing MP-I Project would continue to operate indefinitely under its existing Conditional Use Permit.
- Any wellfield related impacts associated with the existing MP-I Project will continue whether or not the MP-I Replacement Project is approved.
- As such, the MP-I Replacement Project would not be contributory to any existing or future wellfield related impacts and it would not have any cumulative impact on the wellfield.

The RDEIR does not state that observations made by the USGS researchers are not occurring; it only argues that the proposed MP-I Replacement Project would not be contributory under CEQA to any cumulative impacts on elevated CO₂ levels and vegetation-kill that may be associated with existing or future geothermal operations. With respect to commenter’s specific comments regarding the credulity of the RDEIR, we provide the following responses:

Regarding statement (a) – The commenter makes an argument suggesting the term “inference” should be used instead of the term “speculation.” In response – This is an immaterial semantic distinction, and the term “speculation” is an accurate term in the context it has been used in the RDEIR. The following is a quote directly from the abstract of the cited Bergfeld and Evans 2011 reference:

*“We report results of yearly measurements of the diffuse CO₂ flux and shallow soil temperatures collected since 2006 across two sets of tree-kill areas at Long Valley Caldera, California. These data provide background information about CO₂ discharge during a period with moderate seismicity, but little to no deformation. The tree kills are located at long-recognized areas of weak thermal fluid upflow, but expanded in recent years, **possibly** [emphasis added] in response to geothermal fluid production at Casa Diablo...”*

The use of the term “possibly” in describing the observations indicates that the correlation is a theory only and therefore speculation. The commenter then provides excerpts from an earlier reference (Bergfeld et al 2006) about observations made in a different location (Casa Diablo) at a different time and ties them out of context to the reported observations in the Basalt Canyon and near Shady Rest areas discussed in the RDEIR.

Regarding statement (b) – Commenter states that it is misleading to state that a “cause and effect” relationship has not been established. In response – Very localized areas of elevated surface soil CO₂ and tree kill zones are difficult to assign to “cause and effect” relationships in the context of the still-active volcanic caldera. The studies cited in this comment include sites that are many miles distant, or have shown periods of expansion at various times including prior to geothermal energy development at Casa Diablo. Effort was made by the RDEIR authors to evaluate the findings and implications of the Bergfeld and Evans 2011 report. One of the report authors was contacted directly. The researcher advised that while a correlation between vegetation-kill and geothermal production appears to exist, the researcher was unwilling to go on record stating that there was a clear cause and effect between their observations and tree-kill, in part, because the researcher was not a biologist and would not make such a determination

(Personal Communication – Deb Bergfeld, Associate Research Geologist, USGS; November 4, 2011). Hence the RDEIR paraphrases the researcher by stating that, “*a cause and effect relationship has not been established.*”

Regarding statement (c) – The commenter states that the RDEIR conflicts with information published by the USGS. The commenter elicits statements from one of the USGS researchers in response to leading questions and then presents the responses out of context to argue against the credulity of the RDEIR, including the following quoted from the email transcripts attached to Comment Letter 9A:

Commenter Question to Researcher 1: *I would not characterize the statements made in your 2011 paper as “speculation” but as inferences. In fact, Bill I seem to recall you telling me that the tree-kills were undoubtedly a result of geothermal energy production at Casa Diablo. Please correct me if I am wrong in this regard.*

USGS Researcher, William C. Evans Replies: *We stand behind the wording in our published reports, including¹: “The high concentration of thermal and diffuse CO₂ degassing areas around the power plant leaves little doubt that some areas owe their existence to the geothermal operations.” This is more inference than speculation.*

The commenter quotes text by Dr. Evans, (i.e., “*The high concentration of thermal and diffuse CO₂ degassing areas around the power plant leaves little doubt that some areas owe their existence to the geothermal operations.*”) that was extracted from an earlier report (Bergfeld et al 2006) and is not from the Bergfeld and Evans 2011 report from which the cumulative impact described in the RDEIR is identified. In response – This is not an attempt to parse words. The high concentration of thermal and diffuse CO₂ degassing areas around the power plant are described in the Bergfeld et al 2006 report regarding observations of vegetation-kill near the Casa Diablo geothermal complex that predate the wellfield expansion to the west of Highway 395. The potential cumulative wellfield impact described in the RDEIR refers specifically to the recent observations of vegetation-kill in the expanded wellfield areas of Basalt Canyon and near Shady Rest which is first described in the Bergfeld and Evans 2011 report. As noted above [see Regarding statement (a)], the wording in the more recently published USGS report (Bergfeld and Evans 2011) is more speculative: *The tree kills are located at long-recognized areas of weak thermal fluid upflow, but expanded in recent years, **possibly** [emphasis added] in response to geothermal fluid production at Casa Diablo...*”

Commenter Question to Researcher 2: *In my opinion, the DEIR’s statement that a cause and effect relationship has not been established is misleading. We know that elevated CO₂ and soil temperature levels can directly or indirectly (i.e., through stress) kill trees. That said, perhaps it is impossible to prove whether the elevated CO₂ and soil temperature levels are due to energy production (although there appears to be strong correlation).*

USGS Researcher, William C. Evans Replies: *We have not pinpointed the exact cause of tree death, nor do we attribute every dead tree to geothermal operations, but the relation between the overall timing and pattern of vegetation kill and changes in geothermal operations is clear. We stand behind²: “... changes in the size of kill zones, increases in soil temperatures or steam discharge, and changes in CO₂ emissions most likely reflect the response of the shallow hydrothermal system to geothermal fluid production at the Casa Diablo power plant.” The formation of steaming ground is a well-known impact of development at geothermal sites world-wide. The cause and effect relation is largely established even if the precise mechanism by which the trees die is not established.”*

There is no intent in the RDEIR to mislead the public. The rationale for the text, “*a cause and effect relationship has not been established*” is described above [see Regarding statement (b)]. Further, rather than trying to mislead the public, the assessment provided in the cumulative impact section of the RDEIR represents the first known interpretation of the recently published observations in the Basalt Canyon and near Shady Rest areas (Bergfeld and Evans 2011) that a previously unrecognized cumulative impact on vegetation-kill may be occurring associated with existing geothermal wellfield development which could be further impacted by additional or expanded wellfield development. The RDEIR specifically recommends that, “... *the issue should be studied with respect to future projects that would increase utilization of the resource or expand wellfield development.*” However, the fact remains that the proposed MP-I Replacement Project would not be contributory to any existing or future wellfield related impacts and it would not have any cumulative impact on the wellfield.

Commenter Question to Researcher 3: *I disagree with the rationale used for the conclusion that the Project “would not add to the impacts of geothermal operations on vegetation.” Doesn’t your data suggest the tree-kill areas are expanding, and thus that ongoing geothermal development (at present levels) may contribute to further expansion over time?*

USGS Researcher, William C. Evans Replies: *The size of the kill areas is expanding under the current regime. However, a relocation of the power plant that does not involve changes to the fluid production/injection scheme would not be expected to speed up or otherwise alter this process.*

We note that the response by Dr. Evans argues against the contention made by the commenter that, *the Project would contribute to additional expansions of the tree-kills over the course of its 30-year operational life.* As thoroughly described in the RDEIR and summarized in the first paragraph of this Response to Comment 9A-17, the proposed MP-I Replacement Project would not change the existing production/injection wellfield and would not have any effect on the geothermal production or injection fluid flow rates. If the proposed Project is not approved, then the existing MP-I Project would continue to operate and utilize geothermal resources from the wellfield under its existing Conditional Use Permit. As such, the proposed Project would not be contributory to any existing or future wellfield related impacts and it would not have any cumulative impact on the wellfield.

Comment 9A-18 Summary: The commenter states that the proposed Project’s impact on mule deer is cumulatively considerable.

Response to Comment 9A-18: The RDEIR analysis led to the conclusion that the cumulative impact on mule deer from the existing and reasonably foreseeable geothermal energy development projects would be cumulatively considerable, but that the Project at hand would not be contributory to this impact. In order to clarify this analysis, the following text has been added to the RDEIR on page 5-11:

Site-specific vegetation studies and deer movement studies were available for gauging whether the Project may be contributory to a cumulative trend of increasing constraints upon members of the Round Valley and Casa Diablo mule deer herds for habitat availability, loss of forest cover, loss of special use areas, stress (e.g., from disturbance), altered predator-prey relationships, movement among foraging resources or to reach water, cover, or reproductive sites, and movement during the normal period of migration to winter range habitats. At the time of the analysis, vegetation and deer movement data were available for not only the 5.7 acres that the Project will disturb, but the entire foreseeable area where the future implementation of geothermal development may occur including the proposed CD-4 Project. Additional projects that could substantially alter these uses across the expansive public lands used by the local herds were not foreseen.

and there are no large-scale projects that may occur on the small amount of available private land where members of these herds may travel.

The available data indicate that deer habitat for all uses other than movement has been already lost or substantially degraded across the Project footprint, and that actual use in 2011 was primarily to approach surface water resources at Mammoth Creek or move toward relatively undisturbed forested habitats to the north, and that this movement can occur during both the resident and migratory periods. The Project will implement a new crossing of the existing pipeline rack within the corridor affected by the Project, and will cause all known remaining movement corridor habitat within private lands at Casa Diablo to be protected as habitat for deer. Because the Project will conserve and improve habitat availability for deer movement in and around the existing geothermal complex, and this is the only potential use that actually will be affected, it is concluded that the Project will not be contributory of cumulative loss of deer habitat under CEQA.

The available data for the more general area where foreseeable expansion of geothermal energy production may occur indicate a more diffuse and substantially greater (higher index) pattern of deer movements may be potentially affected if facilities such as the proposed CD-4 Project are added. These data, in combination with vegetation studies indicating large areas of relatively undisturbed and presumably good habitat for forage, cover, special use and movement remain there, suggest an impact may be identified if the design of the foreseeable projects do not account for cumulative constraints to habitat availability or movement. The proposed MP-I Replacement Plant Project applies the types of measures (mitigation of an existing linear barrier, preservation of a known movement corridor) that are within the purview of the County of Mono (Cumulative Bio Mitigation Measure 1), and sets a precedent for measures that should be applied if lands within the purview of federal agencies are proposed for development that may impact movement, but the proposed Project does not contribute to the potential for these cumulative impacts to occur.

Comment 9A-19 Summary: The commenter first states that the RDEIR fails to propose effective mitigation measures to reduce the alleged potentially significant impacts to trees (tree kills). The commenter then suggests an analysis of the impacts that the Project and other development projects may have on tree kills needs to be prepared and a monitoring and mitigation plan prepared.

Response to Comment 9A-19: The commenter suggests that a monitoring program should be established at tree-kill sites, in order to follow the course of tree kill zone expansion as it relates to changes in the location or rate of geothermal fluid production brought about by the Project. It would not be possible to establish this relationship. The MP-I Replacement Plant Project will create no new wells and will not change the rate of geothermal fluid extraction, so there will be no change in the location or rate of geothermal fluid production. Monitoring or research to determine if a cause and effect relationship exists is similarly not relevant to the Project because proposed Project operations will not cause the type of changes in extraction that would be needed to test hypotheses about vegetation response to changes in fluid extraction.

In the event that it is established that the observed tree kills are occurring independent of geothermal energy production, then the existing geothermal development and future geothermal energy projects will have no cumulative impacts. If, on the other hand, it is assumed now that a causal relationship between the tree kills nearest the wellfield and pumping rate is established, then a cumulative impact is reasonably foreseen. In the latter scenario, monitoring and mitigation would be triggered by an increase in pumping rate or change in pumping location. As the proposed MP-I Replacement Plant Project does not include the

necessary trigger, and the details of well location and pumping rate for future projects are not yet known, it would be inappropriate to specify the details of the triggers that would be employed. Rather, the RDEIR states that both the causal relationship and the environmental outcome should be studied when conducting the environmental analyses for future projects that do include construction and operation of additional wells or more geothermal fluid production.

Comment 9A-20 Summary: The commenter states that mitigation measures provided in the RDEIR to reduce impacts on mule deer are too vague and inadequate.

Response to Comment 9A-20: Cumulative Bio Mitigation Measure 1 sets forth requirements that impacts to deer movement corridors and patterns of deer movement and resource usage be studied in the preparation of environmental documentation for foreseeable projects. Meaningful monitoring programs are necessarily site-specific, and must be carefully designed in terms of deciding sampling location, density and frequency to provide the answers that are needed to understand and minimize potential impacts particular to each project. While there are projects that are foreseeable, the location, design and operational details that must be considered to prescribe a meaningful monitoring program are not known. These programs should not be prescribed unilaterally when necessary information is absent, but rather as fully detailed, likely multi-year programs that have been built in collaboration with responsible agencies such as Mono County and CDFG, as noted by the commenter. This will be possible only when details of these foreseeable projects become available and precise questions about their environmental effects can be framed for research. The process utilized to identify impacts upon the suspected movement corridor at the proposed MP-I Replacement Plant Project resulted in data collection regarding the timing and magnitude of deer use, and recognition of the extent of the potential impact on this use and appropriate measures to reduce the potential impact to below the level of significance. A baseline was provided for continued monitoring data collection and comparisons that could be used if subsequent projects require answering the questions about effects that were raised by the Project proposal. The RDEIR emphasizes the importance of studying movement corridors and movement patterns, in order to perpetuate an understanding that was gained as a result of the Project studies. It is reasonably concluded that application of this same process as foreseeable development is proposed will have a similar outcome.

Comment Letter 9BA (Exhibit B to Comment Letter 9): David Marcus, Consultant – Letter Dated March 15, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo

Comment 9B-01 Summary: The commenter provides to the CURE counsel a summary of geothermal power production data for the existing MP-I Project power generation units for the period 2007 through 2010 that was reported to have been obtained from a California Energy Commission database.

Response to Comment 9B-01: Comment Noted

Comment Letter 9C (Exhibit C to Comment Letter 9): Matt Hagemann, P.G., C.Hg. – Letter Dated March 22, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo

Comment 9C-01 Summary: The commenter states that the RDEIR fails to adequately review cumulative impacts with respect to the proposed CD-4 project wellfield expansion and possible cumulative impacts on the geothermal aquifer and the Hot Creek headsprings.

Response to Comment 9C-01: See Response to Comment 9-26.

Comment 9C-02 Summary: The commenter states that the existing monitoring of just three wells is inadequate to mitigate the combined impacts from the additional geothermal fluid extraction for the combined existing and reasonably foreseeable geothermal projects.

Response to Comment 9C-02: The commenter expresses an opinion concerning the adequacy of existing and proposed monitoring to mitigate the potential impact on thermal resources resulting from combined operation of the existing and proposed geothermal power plants within the Casa Diablo complex (note that, as part of the Project, the existing MP-I plant would be removed and would no longer exist). It should be noted that there are more than three existing production wells. The commenter appears to ignore the wellfield in the Casa Diablo area. As discussed in Section 5 of the RDEIR, the proposed Project would not alter existing rates of geothermal fluid withdrawal or injection and would thus have no potential to alter existing thermal characteristics in the vicinity. The CD-4 project is the subject of a separate review being conducted by the U.S. Forest Service (USFS). This USFS review will identify necessary measures to mitigate the impact(s) of that project on thermal resources, including required monitoring activities. With respect to the proposed Project, Cumulative Bio Mitigation Measure 3 and Cumulative Hydro Mitigation Measure 1 would require that the Project, as well as all existing and future geothermal power plant projects, be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D, as may be amended), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant. This requirement is sufficient to mitigate any potential as-of-yet undocumented impact of the proposed Project, given that the Project would not change existing utilization of the geothermal resource. Additional and/or different monitoring requirements for the proposed CD-4 project may be identified during the environmental review for that project in order to mitigate specific impacts resulting from the CD-4 plant and its proposed additional wells. However, because those impacts would be exclusive to that project, there is no requirement under CEQA for the proposed Project to mitigate them.

Comment Letter 9D (Exhibit A to Comment Letter 9): James Clark, Ph.D., Clark & Associates – Letter Dated March 22, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo

Comment 9D-01 Summary: Commenter states that isobutane is flammable and there are reports of explosions with the use of isobutene as a refrigerant.

Response to Comment 9D-01: Isobutane is a flammable gas and there have been incidents of explosions associated with leaks of isobutane when it has been used as a refrigerant. However, the commenter is also confusing isobutane and isobutene as the same substance. Isobutane (methyl propane; C₄H₁₀; CAS Number: 75-28-5) is an isomer of butane; while, isobutene (methyl propene; (CH₃)₂C=CH₂; CAS Number: 115-11-7) is a different substance with different chemical properties and different hazard properties. Further, isobutane is not being used as a refrigerant by the existing Casa Diablo power plants, and it is not being proposed for use by the proposed MP-I Replacement Project. The Project would utilize a different motive fluid, n-pentane, in the M-1 replacement plant, and the Project would remove the existing isobutane from the decommissioned MP-I plant.

Comment 9D-02 Summary: The commenter states that pentane is a flammable gas.

Response to Comment 9D-02: In fact, n-pentane is a flammable liquid and is not a gas at standard operating temperature and pressure (STP). This is an important distinction as the chemical properties of n-pentane, in part, contribute to the reduced operating pressures and resulting reduction in fire hazard and fugitive emissions of the motive fluid from the proposed M-1 plant compared isobutane, which is a

*Mammoth Pacific I Replacement Project
Final EIR*

flammable gas at STP, and is the motive fluid which will be removed from the Project site when the existing MP-I plant is decommissioned.

Comment 9D-03 Summary: The commenter states that up to 200 people may be temporarily employed during M-1 plant construction.

Response to Comment 9D-03: The RDEIR assumes a much lower peak construction work force. The RDEIR states that “an estimated peak construction work force of [only] up to 80 workers could be on site periodically during high construction activity periods” (RDEIR, page 2-12).

Comment 9D-04 Summary: The commenter states that the RDEIR does not provide documentation validating the current MP-I motive fluid (isobutane) emission rates or the claimed reduction in M-1 motive fluid (n-pentane) emission rates.

Response to Comment 9D-04: Because the motive fluid emissions are “fugitive” emissions from numerous possible leak points (i.e., valves, flanges, seals, and other connections) and not “stack” emissions they cannot be measured directly. The emission rates were calculated by assuming that all inventory losses of the respective motive fluids from the existing MP-I plant and proposed M-1 replacement plant result from fugitive emissions of the respective motive fluids to the atmosphere.

The historical plant inventory losses of isobutane for the MP-I plant was determined from proprietary plant isobutane purchase records. The replacement amount of isobutane divided by the time interval provides the inventory loss estimate of 500 pounds per day of isobutane emissions.

The inventory loss estimate of 205 pounds per day of n-pentane from the M-1 plant was provided by the Applicant using EPA emission estimate methods for VOC leaks from valves, flanges, and seals (EPA453/R-95-017) and proprietary engineering estimates using operational information on Ormat manufactured equipment in operation at other locations. The spreadsheet calculations are summarized in the following table.

Fugitive n-Pentane Emission Calculations - Typical 16 MW Air-Cooled OEC (Reference Methodology EPA453/R-95-017 Protocol for Equipment Leak Emissions)							
#	Equipment	Qty.	Rate (Kg/Hr/Source)	Day (Kg)	Year (Kg)	Day (lb)	Year (lb)
1	Valves' Gland - Gas phase	6	0.0268	3.86	1,409	8.51	3,105
2	Valves' Gland - Liquid phase	5	0.0109	1.31	477	2.88	1,053
3	Pump seals	5	0.114	13.68	4,993	30.16	11,008
4	Turbine seals	2	0.636	30.53	11,143	67.30	24,565
5	Flanges, Connectors, Screwed	220	0.00025	1.32	482	2.91	1,062
6	Purge System (Normal Process)	8	0.005	0.96	350	2.12	772
Calculated Subtotal:			0.79295	51.66	18,854	114	41,566
7	OEC Operational losses (fill, drain, lube leaks)*	1	1.73	41.52	15,155	92	33,411
Projected Total:			2.52	93.18	34008.95	205	74,977
* Based on Ormat operating experience.							

Comment 9D-05 Summary: The commenter states that the RDEIR does not provide a description of the VRU nor any manufacturer guarantee or other verifiable emission control efficiency information needed to validate the claimed reduction in fugitive motive fluid emissions.

Response to Comment 9D-05: As described in Response to Comment 9D-04, it is assumed that “all losses” of n-pentane from the M-1 plant would result from fugitive emissions. This includes fugitive losses from the VRU regardless of the emission control efficiency of the VRU. This means that the estimated 205 pounds per day on average of fugitive emissions includes losses from numerous potential leak points including leak points associated with the VRU. The inventory loss estimate of 205 pounds per day of n-pentane from the M-1 plant was provided by the Applicant using EPA emission estimate methods for VOC leaks from valves, flanges, and seals (EPA453/R-95-017) and proprietary engineering estimates using compiled operational information on Ormat manufactured equipment in operation at other locations.

The VRU are manufactured by Ormat Systems, Inc. The OEC VRU for the proposed M-1 replacement plant would have an estimated 99.6% efficiency in controlling and recovering n-pentane emissions during normal operations (Application for Authority to Construct submitted to the GBUAPCD; May 27, 2011 and supplemental information submitted to the GBUAPCD). A brief description of the VRU provided by the Applicant to the GBUAPCD is provided below.

Small amounts of air or water vapor typically leak into the OEC Unit pentane system in the condensers and would eventually reduce the operating efficiency of the OEC Unit unless removed. In order to remove these noncondensable gases, each OEC condenser would have a small “OEC vapor recovery unit” (OEC VRU) integrated into the condenser. Each OEC VRU would consist of two chambers and a set of isolation valves. Operation of each OEC VRU would be controlled by the power plant computer control system, which would start the OEC VRU noncondensable gas “purge” sequence whenever the efficiency of the OEC Unit fell below a set point and whenever the air and water vapors return to specification. During “purging,” nearly all of the pentane vapors in the OEC VRU would be compressed into liquid pentane and returned to the OEC Unit, while the noncondensable gases, together with a small quantity of pentane vapors, would be discharged to the atmosphere.

Some OEC Unit major maintenance activities require that at least a portion of an OEC Unit be cleared of pentane liquid and vapors prior to performing the maintenance activities. To control and minimize pentane emissions during these infrequent major maintenance activities, the liquid pentane would first be drained from the section of the OEC Unit (preheater, vaporizer or condenser) to be maintained or repaired and transferred to either another section of the OEC Unit, the pentane storage tanks, or another OEC Unit. The Maintenance VRU diaphragm pump and vacuum pump would then be used to evacuate and compress most of the remaining pentane vapors, returning the pentane liquid to the other sections of the OEC Unit, the pentane storage tanks, or another OEC Unit. Those minimal amounts of pentane vapors which do not condense would be released to the atmosphere through the Maintenance VRU.

Comment 9D-06 Summary: The commenter states the air quality analysis is deficient because it does not include an analysis of the up to two-year transition period during which the MP-I plant and M-1 plant may both be operating.

Response to Comment 9D-06: The operating rate of the respective plants during the transition period is limited by the geothermal fluid provided to each plant, and the maximum geothermal fluid available to Casa Diablo is fixed to the existing maximum geothermal fluid pumping capacity of the wellfield (6,900,000 pounds per hour). This physical pumping limit would not change with the MP-I Replacement Project (RDEIR page 2-17), and the geothermal fluid flow rates to the respective facilities would be inversely proportional. As such when geothermal fluid flow to the M-1 plant increases the geothermal

*Mammoth Pacific I Replacement Project
Final EIR*

fluid flow to MP-I plant must decrease proportionally. Similarly, the combined emissions of isobutane and n-pentane occurring while both plants are operating at reduced capacities would be proportional to the respective fraction that each plant is operating. Motive fluid emissions would range from about 500 pounds per day (when only the MP-I plant is operating) to zero emissions of isobutane and about 205 pounds per day of n-pentane (when only the M-1 plant is operating). In general, when the MP-I plant is operating at a higher capacity than the M-1 plant must be operating at a proportionally lower capacity and vice versa. Thus, at any time the M-1 plant is operating during the transition period there would be a reduction in the total emissions of motive fluid from the MP-I plant. An example series of calculation scenarios when both facilities are operating at various reduced capacities is provided below.

Example Scenario 1:	=	1.0 (500 pounds per day of isobutane) + 0.0 (205 pounds per day of n-pentane)
Total Emissions of motive fluid (100% MP-I and 0% M-1)	=	500 lbs/d of isobutane + 0 lbs/d n-pentane
	=	500 lbs/d Total Emissions of motive fluid
Example Scenario 2:	=	0.75 (500 pounds per day of isobutane) + 0.25 (205 pounds per day of n-pentane)
Total Emissions of motive fluid (75% MP-I and 25% M-1)	=	375 lbs/d of isobutane + 51.25 lbs/d n-pentane
	=	426.25 lbs/d Total Emissions of motive fluid
Example Scenario 3:	=	0.5 (500 pounds per day of isobutane) + 0.5 (205 pounds per day of n-pentane)
Total Emissions of motive fluid (50% MP-I and 50% M-1)	=	250 lbs/d of isobutane + 102.5 lbs/d n-pentane
	=	352.5 lbs/d Total Emissions of motive fluid
Example Scenario 4:	=	0.25 (500 pounds per day of isobutane) + 0.75 (205 pounds per day of n-pentane)
Total Emissions of motive fluid (25% MP-I and 75% M-1)	=	125 lbs/d of isobutane + 153.75 lbs/d n-pentane
	=	278.75 lbs/d Total Emissions of motive fluid
Example Scenario 5:	=	0.0 (500 pounds per day of isobutane) + 1.0 (205 pounds per day of n-pentane)
Total Emissions of motive fluid (0% MP-I and 100% M-1)	=	0 lbs/d of isobutane + 205 lbs/d n-pentane
	=	205 lbs/d Total Emissions of motive fluid

Because the proposed M-1 plant would have a lower motive fluid emission rate than the existing MP-I plant, any proportional increase in M-1 plant operations and decrease in MP-I plant operations would result in a proportional decrease in total emissions of motive fluid compared to the 500 pounds per day of fugitive motive fluid emissions from the existing MP-I plant operations. The commenter appears to understand this concept as evidenced by the argument set forth in the commenter's subsequent assessment (see Comment 9D-09).

Comment 9D-07 Summary: The commenter states that the RDEIR does not provide a condition which (a) requires the Applicant to limit operations of the MP-I and M-1 plants when they are operating together during the transition period such that there is no net increase in motive fluid emissions; or (b) prohibits the Applicant from extending the transition period beyond two years.

Response to Comment 9D-07: (a) The existing production and injection wells of the MPLP Casa Diablo geothermal projects are operated as a system. The maximum physical geothermal fluid pumping capacity for all of the Casa Diablo geothermal projects is 6,900,000 pounds per hour and the physical pumping limit would not change with the MP-I Replacement Project (RDEIR page 2-17). As described in response to Comment 9D-06 above, the net motive fluid emissions during the transition period when both the MP-I plant and M-1 plant may be operating at reduced capacity can only be lower than the existing 500 pounds per day from MP-I. However, to reinforce the project description the following Condition of Approval will be required by the County for the Project.

The rate of geothermal fluid production supplying the Casa Diablo geothermal complex during the startup operating transition period during which both the proposed M-1 power generation facilities and the existing MP-I plant power generation facilities may operate

at the same time shall not exceed the existing geothermal fluid flow capacity of 6,900,000 pounds per hour.

(b) The County is adopting as a condition of MP-I Replacement Project approval, the project description provided in the RDEIR. The project description states that “the transition period during which both MP-I and M-1 operations would overlap may be up to two years from the date that the M-1 plant begins startup operations” (RDEIR, page 2-2). As such, no additional use permit condition is required by the County to enforce the restricted transition time period. However, to reinforce the project description the following Condition of Approval will be required by the County for the Project.

The startup operating transition period during which both the proposed M-1 plant power generation facilities and the existing MP-I plant power generation facilities may operate at the same time shall be a maximum of two years from the date that the proposed M-1 plant begins startup operations of any kind.

Comment 9D-08 Summary: The commenter argues that the use of common facilities by the several existing Casa Diablo geothermal power plants for economy and operational efficiency is an indication that the projects should be viewed as a single project with multiple inputs.

Response to Comment 9D-08: As stated in the RDEIR, each of the three existing geothermal development projects comprising the Casa Diablo geothermal development complex is capable of operating independently and do not rely on each other. As noted, each project has a separate power purchase agreement and separate agency approvals. The existing MP-I project was permitted six years before the MP-II and PLES-I projects and operates under different permit conditions. The use of shared facilities is not a definitive test of whether or not the construction and operation of a series of neighboring projects over time must be viewed as a single project.

See also Response to Comment 9-02 and Response to Comment 9-27.

Comment 9D-09 Summary: The commenter states that the cumulative emissions of motive fluid from two existing geothermal projects (MP-II and PLES-I), one existing plant (MP-I) operating at 50 percent capacity, one proposed replacement project (M-1) operating at 50% capacity, and one proposed new geothermal project (CD-4) totals 1,686 pound per day (about 308 tons per year). The commenter then argues that these cumulative emissions are significant.

Response to Comment 9D-09: By arbitrarily citing the combined reduced capacity motive fluid emissions from the MP-I plant and the M-1 plant during the two-year transition period, the commenter appears to assume that the two-year transition period in which both the MP-I plant and M-1 plant would be operating at reduced capacities would overlap the proposed CD-4 operations. Given the current status of each project’s permit acquisition activities and their respective construction schedules, that assumption appears highly unlikely. As such, the appropriate net cumulative emissions should be restricted to the combined motive fluid emissions from the replacement M-1 plant (205 pounds per day), the existing MP-II and PLES-I plants (500 pounds each per day), and proposed CD-4 plants (336 pounds per day); or a total 1,541 pounds per day (about 281 tons per year). The subject MP-I Replacement Project would reduce the cumulative emissions by approximately 295 pounds per day (about 54 tons per year) from the motive fluid emissions of the existing MP-I plant which it would replace.

The commenter compares the cumulative motive fluid fugitive emissions from the reduced capacity MP-I and M-1 plants, the existing MP-II project, the existing PLES-I project, and the proposed CD-4 project with the Imperial County Air Pollution Control District (ICAPCD) Daily CEQA Tier I Project Operations

Emission Threshold for reactive organic gases (ROG). This comparison is inappropriate as, (a) the ICAPCD emission thresholds are not applicable to the Great Basin Valleys (GBV) air basin in which the projects are located; (b) the cited ICAPCD emissions threshold is only applicable to mobile sources attracted to the proposed project stationary source and would not be applicable to air emissions associated with the stationary source itself; and (c) even if the ICAPCD were applicable, the ICAPCD emission threshold is intended to evaluate the emissions from a single proposed project and not the cumulative emissions from multiple existing and proposed projects. See also Response to Comment 9-15.

The Great Basin Unified Air Pollution Control District (GBUAPCD) regulates stationary emission sources in the GBV air basin. Each of the three existing geothermal plants in the Casa Diablo Geothermal complex area is permitted to operate by the GBUAPCD. Similarly, both the proposed MP-I Replacement Project and the CD-4 project will be required to obtain permits for construction and operation of the new facilities from the GBUAPCD. The CEQA Guidelines significance criterion relevant to cumulative emissions is as follows:

If the project would: ... *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors [RDEIR page 4-40]*

The motive fluids, isobutane and n-pentane, are not criteria air pollutants, but they are ozone precursors. The GBUAPCD has no specific quantitative thresholds for ozone precursors. Further, the MP-I Replacement Project would not result in a net increase in emissions of 250 pounds per day or more of any air pollutant or precursor requiring Best Available Control Technology (BACT) pursuant to GBUAPCD Rule 209-A, Section D; nor would the Project be a major stationary source of emissions (i.e., emissions 100 tons per year or more of any regulated air pollutant) pursuant to GBUAPCD Rule 218.B.7). Further, the proposed Project would reduce the net ROG emissions from the existing MP-I project by approximately 295 pounds per day (about 54 tons per year) and would therefore be a beneficial cumulative impact of the Project.

Comment 9D-10 Summary: (a) The commenter states that following the decommissioning of MP-I and the commissioning of M-1, the cumulative emissions from the Casa Diablo Geothermal complex would be more than 1,000 pound per day and in excess of the ICAPCD Daily CEQA Significance Threshold for (ROG) of 55 pounds per day.

(b) The commenter also states, that the MP-I Replacement Project's contribution to the combined emissions would be significant, accounting for 205 pounds per day of uncontrolled ROG emissions. The commenter argues that the RDEIR should be recirculated with a proper cumulative analysis of the impacts of all pollutants on the region.

Response to Comment 9D-10: (a) As discussed in response to Comment 9D-9 above, the commenter continues to compare the cumulative motive fluid fugitive emissions from the existing MP-II and PLES-I projects, and the proposed MP-I Replacement Project and CD-4 project with the Imperial County Air Pollution Control District (ICAPCD) Daily CEQA Tier I Project Operations Emission Threshold for reactive organic gases (ROG). This comparison is inappropriate as the ICAPCD emission threshold is intended to evaluate the emissions from a single proposed project and not the cumulative emissions from multiple existing and proposed projects. Further, the cited ICAPCD emissions threshold is only applicable to mobile sources attracted to the proposed project stationary source and would not be applicable to air emissions associated with the stationary source itself. Finally, the ICAPCD emission thresholds are not applicable to the Great Basin Valleys (GBV) air basin in which the projects are located.

(b) The proposed MP-I Replacement Project is not a new geothermal project. It is a retrofit of the existing MP-I plant with replacement facilities. The existing environment includes the MP-I plant with its current ROG emissions of 500 pounds per day (91.3 tons per year). The proposed M-I plant represents a net decrease of 295 pounds per day (54 tons per year) of ROG emissions from the existing MP-I plant that would otherwise continue indefinitely if the MP-I Replacement Project is not approved.

Comment Letter 10: Ron Leiken, QEP, Environmental/Regulatory Affairs Administrator, Ormat Nevada, Inc.

Comment 10-01 Summary: The Applicant provides a summary of the benefits of the MP-I Replacement Project.

Response to Comment 10-01: Comment Noted

2.2 Responses to RDEIR2 Comments

Mono County received a total of two (2) comment letters on the RDEIR2 not including attachments. Table 2 lists the individuals and organizations that provided written comments on the RDEIR2 during the 45-day review period.

Table 2: Inventory of Comment Letters Received on the MP-I Replacement Project RDEIR2

Comment Letter No.	Date	Individual	Organization
11	8/6/2012	Richard T. Drury and Christina Caro	Lozeau Drury LLP, counsel representing Laborers International Union of North America, Local 783 (LIUNA)
12	8/6/2012	Elizabeth Klebaner	Adams, Broadwell, Joseph & Cardozo; counsel representing California Unions for Reliable Energy (CURE)

Each of the comment letters is provided in its entirety in Exhibit II to this Final EIR in the order in which the comment letters have been numbered in Table 2, above. Each comment or statement in the appended comment letters for which a CEQA response is provided have been identified within a red box and numbered in the sequence in which the respective comments appear in the comment letter. The same format as that used to create a unique number for each RDEIR comment was also used to number the RDEIR2 comments:

The following are the responses to comments made on the RDEIR2. The responses identify: (a) each comment letter in the order in which the comment letters were numbered, and the names of the individual and organization that submitted the comment; (b) a summary of each identified comment; and (c) the CEQA response to the respective comment.

Comment Letter 11: Richard T. Drury and Christina M. Caro, Lozeau Drury LLP

Comment 11-01 Summary: The commenter urges Mono County to fully comply with CEQA.

Response to Comment 11-01: Comment Noted

Comment Letter 12: Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo, Attorneys at Law

Comment 12-01 Summary: The commenter asserts that the County's analysis of the proposed General Plan Amendment fails to comply with the requirements of CEQA, including: (a) failure to include the proposed General Plan Amendment in the Project description; (b) failure to evaluate alternatives to the proposed Plan Amendment in the RDEIR2; and (c) failure to provide the public and agencies at least 45 days in which to review and comment on the proposed General Plan Amendment.

Response to Comment 12-01: The RDEIR2 provides an expanded Land Use/Planning related assessment of the proposed Project while concurrently evaluating the potential impact of minor clarifying revisions to the language of the General Plan's Land Use and Conservation/Open Space Elements intended to clarify the County's existing intent and interpretation of limitations on geothermal development within the Hot Creek Buffer Zone.

While the commenter does not provide evidence to support the assertions, it is understood that this is an introductory statement and that further elaboration is forthcoming in subsequent comments. The commenter is directed to Responses to Comments 12-02 through 12-05.

Comment 12-02 Summary: The commenter asserts that the County is proposing a General Plan Amendment which would authorize development of geothermal facilities within 500 feet of a watercourse in the Hot Creek Buffer Zone. The commenter further asserts that this suggested General Plan Amendment was not provided in the Project description as required by CEQA.

Response to Comment 12-02: The commenter is incorrect in the assertion that the Project description in the RDEIR2 does not mention the need for a variance from the 500-foot watercourse setback in the Hot Creek Buffer Zone. The commenter is also incorrect in the assertion that the Project description does not identify the proposed clarifying revisions to the County's General Plan. The commenter is further incorrect in asserting that the clarifying revisions would authorize geothermal facilities (other than the replacement plant, if the variance is granted) within 500 feet of a watercourse in the Hot Creek Buffer Zone.

Both the Project's need for a variance and the County's proposed clarifying revisions to its General Plan are presented and discussed in the Project description portion of the RDEIR2 on pages 3, 10 (in Table 1), 15, and 18. In addition, a complete evaluation of the environmental impacts of the proposed variance and clarifying General Plan revisions is provided in Chapters 4.10 and 5 of the RDEIR2. A listing of the discretionary actions associated with the Project, including the required variance, is presented both in Table 1 and in Table 34 of the RDEIR2. The Notice of Completion (NOC) for the RDEIR2 identified the proposed clarifying General Plan revisions as being part of the Project being evaluated in the RDEIR2. Lastly, the Project would not authorize the placement of geothermal facilities (other than the proposed replacement plant if the variance were granted) within 500 feet of a watercourse. The 500-foot setback requirement remains in effect and any hypothetical future geothermal facility proposed within the Hot Creek Buffer Zone would need to obtain a variance from that requirement in order to locate facilities within 500 feet of a watercourse, consistent with current General Plan requirements. Further, as discussed in Responses to Comments 12-03 and 12-04, there is no hypothetical future geothermal development subject to the 500-foot setback which would require such a variance.

Thus, the County has fully complied with the case law and the sections of the CEQA Guidelines cited by the commenter in disclosing the complete Project description and the discretionary actions needed to approve the proposed Project.

Comment 12-03 Summary: The commenter, continuing with the assertion that a General Plan Amendment is a required part of the proposed MP-I Replacement Plant Project; argues that a reasonable range of alternatives to the asserted General Plan Amendment portion of the Project must be evaluated in

the EIR. The commenter also states that the clarifying amendment would reverse, rather than clarify, the County's prior legislation with respect to all future geothermal development in the County.

Response to Comment 12-03: As is presented on page 3 of the RDEIR2:

“The Project would not be inconsistent with the Land Use or Conservation/Open Space Elements of the Mono County General Plan if the requested variance is granted. Chapter 33 of the General Plan authorizes the granting of variances from land development regulations, including the 500-foot setback requirement imposed by Section 15.070(B)(1)(d), provided certain findings can be made. A subsequent reference to the 500-foot setback contained within the Conservation/Open Space Element does not itself impose the setback, but instead is a reference to the requirement imposed by Section 15.070(B)(1)(d), which is subject to variance in accordance with Chapter 33.”

The County's decision to grant a variance to the Project to permit a portion to extend into the 500-foot stream setback within the Hot Creek Buffer Zone does not require a General Plan Amendment. As is also presented on page 33 of the RDEIR2:

“The land development regulations within Mono County's General Plan contain requirements formerly imposed by the County's zoning ordinances. Those zoning ordinances were incorporated into the Land Use Element of the County's General Plan in 2000, in accordance with an opinion from the California Attorney General (see 81 Ops.Cal.Atty.Gen 57 (1998)). Chapter 33 of the General Plan allows the Planning Commission to grant variances from the Land Development Regulations, provided that certain findings can be made.

The setback requirements of section 15.070(B)(1)(b) and (d) were originally codified in the County's zoning ordinances at section 19.59.100 (see Appendix O). Variances from the provisions of the land development regulations (including these requirements) may be granted upon a finding that the conditions set forth in Government Code section 65906 (which authorizes variances from zoning requirements) exist, together with certain additional findings. Accordingly, any variance granted pursuant to Chapter 33 would also comply with section 65906.

...(T)he County proposes to add clarifying language to the Conservation and Open Space Element of its General Plan to clearly identify Action 1.13 (supporting Goal 1 and Objective D, Policy 1) as being imposed by and implemented through section 15.070(B)(1)(d) of the Land Development Regulations and to clarify that the 500-foot setback from any surface watercourse is a land development regulation of the General Plan subject to variance in accordance with Chapter 33 and is not “imposed twice” by virtue of being cited as an action taken in furtherance of the goals and polices set forth in the Conservation and Open Space Element.”

An error was inadvertently made in the text on page 29 in the list of required approvals for the Project. The item “Clarifying General Plan Amendments” should not have been included in this list and has been omitted from this Final EIR (see Chapter 3, Compiled Revisions to the Draft EIR).

The County is proposing to clarify its own General Plan language, although these revisions are not necessary in order to approve the proposed Project. As a result, it is not necessary to identify and evaluate the potential impact of a Project alternative that would “not require an amendment to the General Plan”.

On the other hand, the County’s proposed clarifying revisions to its General Plan do not constitute a stand-alone “project” under CEQA requiring its own alternatives analysis separate from that of the proposed Project. The RDEIR (at Chapter 2.2) fully evaluated alternatives to the proposed MP-I Replacement Project, per CEQA requirements. The evaluated North Site Alternative, in fact, would not require a variance from the 500-foot stream setback because it would be located on federal land and would not be subject to County land use regulations, including the 500-foot setback (as discussed at RDEIR2, p.37). The potential environmental impact of the County’s proposed clarifying General Plan revisions is evaluated and disclosed at pp. 33-37 of the RDEIR2; including its potential impact with respect to the Project alternatives. No separate analysis of alternatives to the proposed clarifying General Plan revisions is required, as these revisions do not constitute a “project” under CEQA; rather, they are a part of the proposed MP-I Replacement Project, although they are not necessary for the Project to be approved.

The commenter erroneously states that the County’s “proposed action [is] to remove restrictions on geothermal development within the Hot Creek Buffer Zone...” In fact, the proposed clarifying General Plan revisions would do no such thing, as is discussed on pp. 33-37 of the RDEIR2. The proposed clarifications would merely explicitly state that no geothermal development located within the Hot Creek Buffer Zone shall occur within 500 feet on either side of a surface watercourse unless a variance is granted in accordance with Chapter 33 of the Mono County Code, consistent with current requirements.

There is no conflict between the Project and the County’s General Plan, even if one were to accept the commenter’s interpretation as being correct – as the clarifying revisions would then be a modification of the General Plan with which the Project would be consistent, provided a variance were granted. In any event, the mere fact that a project is inconsistent with a policy objective contained in an adopted land use plan does not create a significant impact under CEQA. In order for a significant impact to occur, a project must impact the quality of the environmental resource(s) that the policy objective in question was designed to protect. Protecting hydrologic resources within Hot Creek and its tributaries is the purpose of the 500-foot setback requirement. The Project would replace an aging geothermal processing facility with a new facility utilizing updated technology. It does not involve any change to the geothermal wellfield or to the amount of geothermal fluid utilized. Accordingly, there is no impact to hydrologic resources resulting from the Project. Additionally, as is shown in the analysis presented in Section 4.8 of the RDEIR, the Project would include a series of Hydro Design Features that would ensure that pollutants from the M-1 plant site or the storage pad to be created on the site of the existing MP-I plant would not be discharged to stormwater or groundwater, including the geothermal reservoir. Because the Project would not significantly impact the quality of these hydrologic resources, there is no potential for the Project to result in a significant impact. The extent to which the County’s proposed clarifying General Plan revisions could potentially affect other locations within the Hot Creek Buffer Zone is addressed in the RDEIR2 (pp. 34-36). That analysis demonstrates that there would be no effect, as reiterated in Response to Comment 12-04.

Comment 12-04 Summary: The commenter, continuing with the assertion that a General Plan Amendment is part of the proposed MP-I Replacement Plant Project, argues that the RDEIR2 does not analyze the secondary effects of the asserted General Plan Amendment portion of the Project.

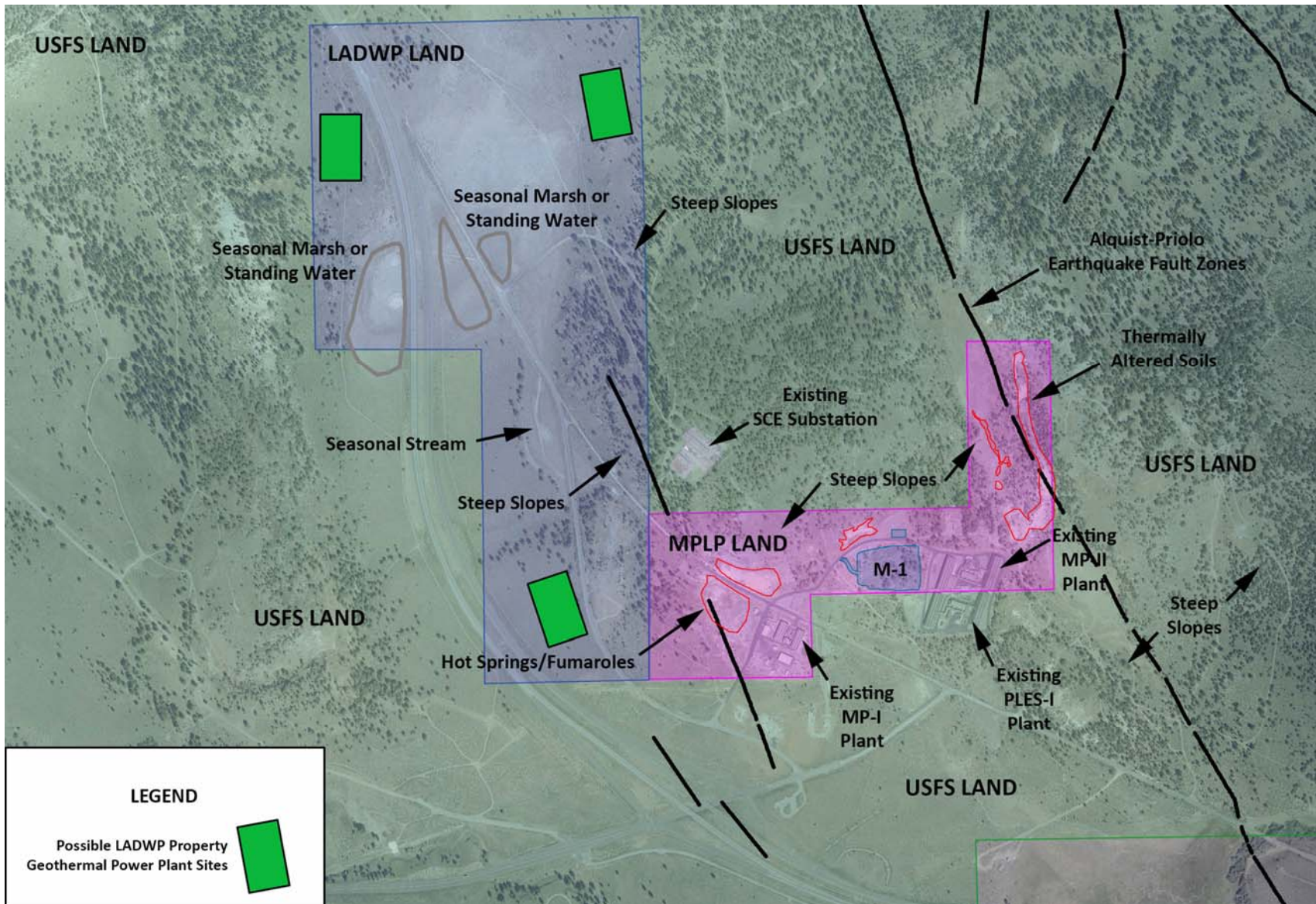
Response to Comment 12-04: Contrary to the commenter’s assertions, the RDEIR2 (at pp. 33-37) presents an analysis of the potential environmental impact of the County’s proposed clarifying General Plan revisions, both with respect to the Project and with respect to other possible geothermal development at other sites subject to the 500-foot setback requirement.

The commenter asserts that the County erred in interpreting the Open Space Element of its General Plan (specifically, Energy Resource Goal 1, Objective B, Policy 1). To the contrary, the RDEIR2 (p. 35, first

bulleted paragraph) explicitly states that the referenced policy barring County approval of any geothermal development within the Hot Creek Buffer Zone unless all impacts are less than significant (or reduced to a less than significant level via mitigation) does not apply within the Casa Diablo area shown on Figure 38. This policy is cited in the RDEIR2 in order to illustrate that the County’s proposed clarifying revisions could not result in a significant environmental impact occurring within the portions of the Hot Creek Buffer Zone that are outside of the Casa Diablo area.

However, within the Casa Diablo area of the Hot Creek Buffer Zone, the restriction of Energy Resource Goal 1, Objective B, Policy 1 does not apply. Accordingly, if one were to look solely to CEQA (and ignore other factors), a variance from the 500-foot setback could theoretically be approved in this area even if it would result in significant, unavoidable environmental impacts, so long as the required CEQA findings and statement of overriding considerations were adopted. However, in reality, no such variance could actually be approved by Mono County because, as noted in the RDEIR (the second bulleted paragraph on p. 35), there are no other lands within the Casa Diablo portion of the Hot Creek Buffer Zone that would require or meet the conditions for a variance. Within the Casa Diablo portion of the Hot Creek Buffer Zone, there are just two private parcels of land: the “Ormat” parcel (on which the proposed Project would be located) and the “LADWP” parcel, which consists of 194 acres. The commenter correctly notes that, per the analysis in Chapter 2.2 of the RDEIR, no portion of the “Ormat” parcel other than the proposed Project Site evaluated in the RDEIR would be suitable for future geothermal development. Thus, no future variance request other than the one being made for the proposed MP-I Replacement Project from the 500-foot setback requirement is reasonably foreseeable for future geothermal development on the “Ormat” parcel.

With respect to the “LADWP” parcel, as is shown on Figure 39 of the RDEIR2, three potentially feasible locations exist that are each more than 500 feet from a blue-line watercourse and would thus represent potentially feasible locations for future geothermal power plant site development that would not require a variance from the 500-foot setback requirement. The commenter notes that several other factors, including economic considerations, could influence the proposed location of any future hypothetical geothermal development proposal at the “LADWP” parcel. However, none of the possible geothermal power plant sites shown on the LADWP land has the same constraints as those identified on the existing Casa Diablo geothermal complex project site. Specifically, they do not contain steep slopes, Alquist-Priolo fault zones or hot springs/fumaroles (see FEIR Drawing 1 showing the possible geothermal power plant sites located on the LADWP land plotted on the Plant Siting Constraints Map earlier provided as Figure 18 in the RDEIR). Thus, although other adverse environmental effects may be associated with locating future geothermal power production facilities on these sites, they do represent potentially feasible locations for future geothermal development outside the 500-foot stream setback that are not constrained by the conditions of the Project site. A variance is only available to the County’s land development regulations if special circumstances applicable to the property deprive it of privileges enjoyed by other property in the vicinity and in an identical land use designation and if the grant of variance will not be injurious to property in the area. Because several feasible sites exist on the “LADWP” parcel, a variance would not be required or authorized. And the 500-foot setback does not apply on federally-owned lands within the Casa Diablo area, as such lands are outside of the jurisdiction of local land use authority. The text on p. 35 of the RDEIR2 has been revised to add this information (see Chapter 3, Compiled Revisions to the Draft EIR). As a result, the RDEIR2 does provide a sufficient basis for the conclusion that no significant impacts would result from the proposed General Plan revisions.



FEIR Drawing 1: Possible Geothermal Power Plant Sites Located on LADWP Land Plotted on the Casa Diablo Area Plant Siting Constraints Map

In any event, and as previously discussed, the proposed revisions are not necessary in order to grant such a variance (for the proposed project or for any hypothetical future project). Under the current General Plan language, a variance may be granted from the 500-foot setback requirement in the Casa Diablo area, so long as the required Chapter 33 variance findings are made. The proposed clarifying revisions would not create a new ability to grant such variances; thus, no potential exists for a new environmental impact that could not occur under existing conditions to result from the adoption of the proposed clarifying General Plan revisions.

Lastly, the commenter asserts that the RDEIR2 impermissibly defers environmental review by relying upon future CEQA review of hypothetical future proposals for geothermal projects within the Casa Diablo area of the Hot Creek Buffer Zone as a means of identifying and mitigating the environmental impacts of such development. This is not the case. In fact, the RDEIR2 does not rely upon such future CEQA review but merely acknowledges that such review would be required for any future project requesting a variance from the 500-foot stream setback (third bulleted paragraph, p. 35). The RDEIR2's analysis in the first two bulleted paragraphs on page 35 presents a sufficient analysis to support the RDEIR2's conclusion that no significant environmental impact would result from the proposed clarifying General Plan revisions. The fact that future geothermal development proposals that could request a variance from the 500-foot setback requirement would be required to undergo future CEQA review is simply presented as an additional level of scrutiny that would address the specifics of these potential projects in a manner that is not possible at the present time given that no such projects have actually been proposed for the subject parcel.

Thus, the RDEIR2 did adequately address the reasonably foreseeable secondary environmental effects of the proposed clarifying General Plan revisions.

Comment 12-05 Summary: The commenter notes that California Government Code requires that County amendments to a general plan must provide citizens and local agencies notice and at least 45 days to comment on a proposed general plan amendment. Commenter then asserts that the County has not complied with the identified procedural requirements.

Response to Comment 12-05: The County originally requested a shortened review period for the second Revised Draft EIR, which was granted by OPR, but subsequently distributed an updated Notice of Availability (NOA) on August 7, 2012 to all recipients of the original NOA, including the commenter, indicating that the originally identified 45-day public review period would continue through August 20, 2012. The result is that the public had a total of 46 days in which to review the RDEIR2.

3 COMPILED REVISIONS TO THE DRAFT EIR

The original Draft EIR for the MP-I Replacement Plant Project was distributed for public review on July 13, 2011. The text of the Draft EIR was substantially revised and the Revised DEIR (RDEIR) was recirculated for public review on February 27, 2012. Subsequently, text to clarify the Mono County General Plan was added to the RDEIR creating the Second Revision of the DEIR (RDEIR2), which was recirculated for public review on July 6, 2012. The compiled changes to the text of the RDEIR resulting from (a) public comments on the RDEIR; (b) the text changes of RDEIR2; and (c) public comment on the RDEIR2 have been made as described in the Responses to Comments section of this Final Environmental Impact Report (FEIR).

The compiled changes and minor editorial corrections to the text of RDEIR and RDEIR2 are provided below. The text of the RDEIR and RDEIR2, as amended by the following changes, represents the text of the FEIR. In the hopes of alleviating potential confusion on the part of readers, a “Unified” EIR document that incorporates all of these revisions into a single complete report is attached as Exhibit III to this Final EIR.

Note – Deleted text is shown with a ~~strike through~~ and added text is shown in underline.

3.1 Revisions Resulting from Public Comments on the RDEIR

The following revisions to the text of the Draft EIR resulting from the RDEIR have been made as described in the Responses to Comments section of this Final Environmental Impact Report (FEIR).

RDEIR Revision 1: Editorial Correction – Acronym on Page xii of the RDEIR has been revised as follows:

~~MCEED~~MCEDD Mono County Economic Development Department

RDEIR Revision 2: Editorial Correction – Last sentence of Paragraph 5, Page 1-5 of the RDEIR has been revised as follows.

Most of the public land in the Project vicinity is designated Resource Management (see Figure 3 ~~Error! Reference source not found.~~).

RDEIR Revision 3: Editorial Correction – The right column of Table 4 of the RDEIR in the “Mono County Planning Commission” row has been revised as follows.

Variance (Setback requirements in Chapter 15 and RE Land Use Designation)

RDEIR Revision 4: See Response to Comment 8-01 from Jan M. Zimmerman, P.G., Environmental Geologic, Lahontan Regional Water Quality Control Board. Paragraph 5, Page 4-124 of the RDEIR has been revised as follows:

Jurisdictional Waters

There are no waters, wetlands, or riparian habitat areas on the project site that qualify as jurisdictional resources with respect to the Corps or the CDFG. As noted above, a small, unnamed stream flows through the project site area between the existing MP-I plant site and the proposed M-I plant site. No other streams or surface waters are located within the Project area, nor are there any cold springs, seeps or wet swales. All groundwater and surface waters in the project site area are jurisdictional waters of the State. In addition, the unnamed ephemeral stream that crosses the project site area may be a jurisdictional water of the U.S. To date, the Corps has not made a jurisdictional determination regarding this stream.

In addition, the following environmental protection measure has been added to Page 4-126 of the RDEIR as Hydro Design Feature 6:

Hydro Design Feature 6: No element of the project construction shall result in the alteration of, or discharge of fill material to, the blue-line drainage channel that crosses the site between the existing MP-I and proposed M-I plant sites, adjacent to Old Highway 395. Prior to commencement of construction, the Applicant shall provide to the County the proposed engineering design for the road crossing which demonstrates to the County that no impact to this drainage channel would occur as a result of project construction.

RDEIR Revision 5: See Response to Comment 9-21 from Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo, Attorneys at Law. The following discussion has been added to the end of the second paragraph on Page 3-7 of the RDEIR.

Under the scenario that all of the water provided to the site by construction contractors would be procured from Mammoth Community Water District sources, a conservatively estimated 35,000 gallons of water would be required each working day over the course of the 8-month construction period to serve project needs, or a total of 5,600,000 gallons. According to the 2010 Urban Water Management Plan published by MCWD, total water demand in 2015 is projected to be 2,565 acre-feet per year (2,288,000 gallons per day). Therefore, the Project's temporary water consumption would constitute approximately 1.5 percent of total anticipated demand. The MCWD estimates that 4,276 acre-feet per year of water will be available in 2015, or approximately 40 percent more supply than projected demand. The Project's temporary water consumption would constitute approximately 0.9 percent of projected available supply. In addition, an agreement between the project construction contractor and MCWD for this water would be necessary and it is likely (though not certain) that reclaimed water would be provided for the dust suppression portion of the construction water demand in accordance with Lahontan Regional Water Quality Control Board regulations governing allowable uses of reclaimed water (MCWD, 2012). Given that project water consumption would be temporary and would not represent a long-term addition to existing MCWD water usage, this impact is less than significant.

RDEIR Revision 6: See Response to Comment 9-28 from Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo, Attorneys at Law. The following sentence has been added to the second full paragraph on Page 4-71 of the RDEIR, as follows.

The monitoring program is coordinated by the Long Valley Hydrologic Advisory Committee (LVHAC). The most recently compiled LVHAC data summary (2012) submitted to Mono County by the U.S. Geological Survey (USGS) and the joint funding agreement among the USGS, BLM and Mono County are attached as Appendix M and Appendix N to the RDEIR, respectively. The monitoring data is routinely evaluated by the Mono County Economic Development Department (MCEDD), the LVHAC and CDFG (Mono County General Plan, Energy Resources, Goal 1, Objectives C and D). Small changes have been observed in some of the Long Valley caldera springs since the Casa Diablo geothermal operation began in 1984 (see Section 4.8), but, to date, there have been no substantive impacts on the Hot Creek headsprings supporting the Owens tui chub that have been attributed to geothermal development in the Long Valley caldera. The LVHAC will continue to conduct the hydrologic and biologic monitoring activities (Personal Communication – Dan Lyster, Director, MCEDD; June 22, 2011).

The same sentence has been added to the sixth paragraph on Page 4-134 of the RDEIR as follows.

The monitoring program is coordinated by the LVHAC. MPLP and the USGS are currently conducting the hydrologic and biologic monitoring prescribed by the Mono County General Plan via their participation in the LVHAC. The most recently compiled LVHAC data summary (2012) submitted to Mono County by the U.S. Geological Survey (USGS) and the joint funding agreement among the USGS, BLM and Mono County are attached as Appendix M and Appendix N to the RDEIR, respectively. Monitoring locations may change with time as conditions and available information dictate (see Figure 36), but representative monitoring data continues to be routinely evaluated by the Mono County Economic Development Department (MCEDD), the LVHAC and CDFG (Mono County General Plan, Energy Resources, Goal 1, Objectives C and D).

RDEIR Revision 7: See Response to Comment 9A-07 from Scott Cashen, M.S., Senior Biologist – Letter Dated March 23, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo. Third sentence of Paragraph 1, Page 4-66 of the RDEIR has been revised as follows:

However, the findings of the M-1 plant site specific deer survey ~~determined and botanical survey results, and inspection of the existing configuration of the geothermal complex,~~ indicate that the main use of the existing MP-I Project area by deer is as a movement corridor.

RDEIR Revision 8: See Response to Comment 9A-18 from Scott Cashen, M.S., Senior Biologist – Letter Dated March 23, 2012 to Elizabeth Klebaner; Adams Broadwell Joseph & Cardozo. Additional clarification text is provided following Paragraph 3 on Page 5-11 of the RDEIR as follows.

Site-specific vegetation studies and deer movement studies were available for gauging whether the Project may be contributory to a cumulative trend of increasing constraints upon members of the Round Valley and Casa Diablo mule deer herds for habitat availability, loss of forest cover, loss of special use areas, stress (e.g., from disturbance), altered predator-prey relationships, movement among foraging resources or to reach water, cover, or reproductive sites, and movement during the normal period of migration to winter range habitats. At the time of the analysis, vegetation and deer movement data

were available for not only the 5.7 acres that the Project will disturb, but the entire foreseeable area where the future implementation of geothermal development may occur including the proposed CD-4 Project. Additional projects that could substantially alter these uses across the expansive public lands used by the local herds were not foreseen, and there are no large-scale projects that may occur on the small amount of available private land where members of these herds may travel.

The available data indicate that deer habitat for all uses other than movement has been already lost or substantially degraded across the Project footprint, and that actual use in 2011 was primarily to approach surface water resources at Mammoth Creek or move toward relatively undisturbed forested habitats to the north, and that this movement can occur during both the resident and migratory periods. The Project will implement a new crossing of the existing pipeline rack within the corridor affected by the Project, and will cause all known remaining movement corridor habitat within private lands at Casa Diablo to be protected as habitat for deer. Because the Project will conserve and improve habitat availability for deer movement in and around the existing geothermal complex, and this is the only potential use that actually will be affected, it is concluded that the Project will not be contributory of cumulative loss of deer habitat under CEQA.

The available data for the more general area where foreseeable expansion of geothermal energy production may occur indicate a more diffuse and substantially greater (higher index) pattern of deer movements may be potentially affected if facilities such as the proposed CD-4 Project are added. These data, in combination with vegetation studies indicating large areas of relatively undisturbed and presumably good habitat for forage, cover, special use and movement remain there, suggest an impact may be identified if the design of the foreseeable projects do not account for cumulative constraints to habitat availability or movement. The proposed MP-I Replacement Plant Project applies the types of measures (mitigation of an existing linear barrier, preservation of a known movement corridor) that are within the purview of the County of Mono (Cumulative Bio Mitigation Measure 1), and sets a precedent for measures that should be applied if lands within the purview of federal agencies are proposed for development that may impact movement, but the proposed Project does not contribute to the potential for these cumulative impacts to occur.

3.2 Clarifying Revisions to the Recirculated RDEIR2

The following revisions to the text of the RDEIR2 were identified by the County in the course of preparing responses to public comments on the RDEIR2, but are not directly responsive to such comments (see Section 3.3 below for revisions in response to specific public comments on the RDEIR2).

RDEIR2 Document Revision 1: The following text was revised in the List of Appendices on page *iv* of the RDEIR2:

Appendix O: Selected Portion of the Former Mono County Zoning Ordinance

RDEIR2 Document Revision 2: The following text was revised on page 13 of the RDEIR2:

The following relevant Development Standards are set forth in the Land Use Element of the General Plan (Section 15.070(B)(1)(b and d):

*Mammoth Pacific I Replacement Project
Final EIR*

- B. *Setbacks:*
1. *No processing equipment or facilities ~~or~~ shall be located and no resource development shall occur within: the following minimum setbacks:*
...

*Mammoth Pacific I Replacement Project
Final EIR*

RDEIR2 Document Revision 3: The following text has been deleted from the fifth column of the “Land Use/Planning” row in Table 1 on pages 10-11 of the RDEIR2:

~~4: The County would approve clarifying General Plan Amendments.~~

RDEIR2 Document Revision 4: The following footnote has been added to the end of the first partial sentence at the top of page 15 of the RDEIR2:

¹ Note: The Variance is also from the same requirement as it appears in the Resource Extraction land use designation.

RDEIR2 Document Revision 5: The following text has been revised in the last full paragraph on page 22 of the RDEIR2:

The General Plan notes that the RM designation is intended “to recognize and maintain a wide variety of values in the lands outside existing communities,” including “geothermal or mineral resources.” “Mining and geothermal exploratory projects” are explicitly “uses permitted subject to use permit” within the RM designation, and other “similar” uses may also be permitted ~~uses~~. The existing MP-I project power plant and well field are located on both private and public land with a RM LUD. The existing MP-I plant site-decommissioning activities that are proposed as part of the Project would be conducted exclusively on private land with a LUD of RM.

RDEIR2 Document Revision 6: The following text has been revised in the last full paragraph on page 26 of the RDEIR2:

The proposed M-1 replacement power plant site would be located on the eastern parcel of the 90 acres of private (fee) land owned by Ormat and under geothermal lease to MPLP. No Project activities are proposed on public lands, and no known discretionary approvals are required from any federal agencies for the proposed MP-I Replacement Project. The proposed Project is consistent with the existing land use designation of Resource Extraction (RE) for the Project site. However, variances from specific land development regulations contained within the Land Use Element of the General Plan (and from the same requirement as it appears in the RE land use designation) would be required in order to approve specific components of the Project (see discussion below). In addition, as part of the Project, the County proposes to make two clarifying amendments to the General Plan (see discussion below).

RDEIR2 Document Revision 7: The following text beginning with the second sentence in the last paragraph on page 26 and extending through the first two complete paragraphs on page 27 of the RDEIR2 has been revised as follows:

In addition, MPLP has submitted a Reclamation Plan for restoration/mitigation of the Project as required by Mono County ~~for the Project which must be approved by Mono County; and to actually commence construction of the new M-1 replacement plant.~~ MPLP would also need to submit applications for and obtain approval, as necessary, from other responsible agencies for discretionary permit(s) and from Mono County for approval of grading and building permits required for construction.

~~Conformance with the direction provided by the relevant General Plan goals, objectives and policies discussed or referenced above is also a County objective for the Project and~~

~~the EIR.~~ In order for the Project to conform to Development Standards in the Land Use Element of the General Plan, the Applicant has applied for the following variances:

- An Aboveground Power Line Variance (needed for either of the two proposed aboveground interconnection transmission line options which would connect the Project substation with an existing SCE transmission line); and
- Development Standards Chapter 15 Resource Extraction Designation – Variance (needed to allow the construction of processing equipment or facilities within 100 feet of an exterior property line; and to allow geothermal development to occur within 500 feet of a surface watercourse within the Hot Creek Buffer Zone).¹

The County ~~will~~ may also concurrently approve draft minor revisions to the General Plan that clarify the County’s intent with respect to limitations on geothermal development within the Hot Creek Buffer Zone (see Figure 38 and discussion below).

¹ Note: The Variance is also from the same requirement as it appears in the Resource Extraction land use designation.

RDEIR2 Document Revision 8: The following text in the first paragraph under the “Agency Required Permits” sub-heading on page 27 of the RDEIR2 has been revised as follows:

Activities proposed on the private lands within the Project area by MPLP are subject to the approval of a Conditional Use Permit by the Mono County Planning Commission. The County must also approve the two required variances to the Development Standards and RE land use designation in the Land Use Element of the General Plan for proposed activities on the private lands, as well as a Reclamation Plan. Ministerial building permits for construction of some aspects of the Project would be issued, as required, by the Building Division of the Mono County Community Development Department and the Mono County Department of Public Works.

RDEIR2 Document Revision 9: The following text in the fourth paragraph (bullet list) on page 29 of the RDEIR2 has been revised as follows:

To summarize, the following approvals are required from Mono County for the Project:

- A Conditional Use Permit for the M-1 replacement plant (including the granting of a height exception for mechanical appurtenances) and decommissioning/reuse of the existing MP-I plant site as a storage area;
- A Variance for setback reductions from property line(s); setback reductions from streams designated by a blue line on USGS topographic maps for structures within the 5.7-acre proposed M-1 plant site; and for grading of the existing MP-I plant site for use as an equipment storage area;
- A Variance to construct an aboveground electrical transmission line;
- ~~• Clarifying General Plan Amendments;~~
- Grading Permit;
- Building Permits; and
- A Reclamation Plan.

A clarifying General Plan revision is also proposed, but is not required for approval of the Project.

RDEIR2 Document Revision 10: The text in the first paragraph (bullet) on page 30 of the RDEIR2 has been revised as follows:

- Building Heights (Land Use Element – Development Standards): Although the proposed M-1 geothermal plant would have a maximum height of approximately 35 feet above the excavated ground level, two-inch diameter vent pipes (from the purge tanks) and one-inch diameter lightning masts on top of the air cooling towers (see Figure 8 of the RDEIR) would extend to approximately 40 feet above ground level. This would exceed the permitted maximum height of 35 feet; however, Mono County regulations allow for exceptions in the cases of mechanical appurtenances. The purge tank vent pipes and lightning masts on top of the condensers qualify as “mechanical appurtenances” and would thus qualify for the height exception, subject to a Director Review/Conditional Use Permit. These mechanical appurtenances are part of the CUP application for the Project and were evaluated in the RDEIR (see Section 4.2.3). Thus, the project would be in compliance with County building height regulations if approved through the ~~Director Review/Conditional Use Permit~~ process.

RDEIR2 Document Revision 11: The text in the bottom paragraph on page 32 of the RDEIR2 has been revised as follows:

As noted previously, the Project would not be consistent with the 100-foot exterior property line setback requirement contained in the Land Use Element of the General Plan (Section 15.070(B)(1)(b) and in the RE land use designation) unless a variance is granted. The Project would be consistent with this policy if such a variance were granted. The Project Applicant has requested such a variance, a variance from this setback is authorized by the General Plan and is evaluated in the RDEIR, and evidence in the record supports the required findings for granting the variance.

RDEIR2 Document Revision 12: The text at the top of page 33 of the RDEIR2 has been revised as follows:

General Plan ~~Amendments~~ Clarification

The County ~~has determined~~ proposes that to add clarifying language ~~should be added~~ to the Conservation and Open Space Element of its General Plan, as well as to the land development regulations in the Land Use Element of its General Plan, as shown and discussed below.

RDEIR2 Document Revision 13: The second to last full paragraph on page 33 of the RDEIR2 has been revised as follows:

A variance from sections 15.070(B)(1)(b) and (d) (and from the same requirement as it appears in the Resource Extraction land use designation) has been requested by the Project Applicant in order to permit a portion of the new M-1 power plant to be constructed within 500 feet of a mapped blue line stream and within 100 feet of an exterior property line, and to remove the existing MP-I structure and replace it with a

graded storage area. The environmental consequences of these variances have been evaluated in this RDEIR and evidence in the record supports the necessary findings for the granting of the variance.

RDEIR2 Document Revision 14: The last sentence on page 33 of the RDEIR2 has been revised as follows:

The proposed General Plan ~~Amendment~~ clarifying revision would read as follows (new language shown in underline):

RDEIR2 Document Revision 15: The text in the last paragraph on page 34 and first full paragraph on page 35 of the RDEIR2 has been revised as follows:

The proposed ~~amendment-revisions~~ would clarify the County's intent and interpretation of its own General Plan. The setback requirement is a land development regulation, from which a variance may be granted consistent with the General Plan; there would be no substantive change to the General Plan. In addition, as discussed in Section 6.3 of the RDEIR, all impacts associated with the proposed Project, including the proposed variances, would be either less than significant or reduced to a level that is less than significant through the implementation of required project design features, environmental protection measures and mitigation measures. As is discussed throughout the RDEIR, the Project involves the decommissioning and removal of the MP-I power plant and its replacement with a new, more modern plant in a location that is approximately 200 feet further away from the mapped blue-line stream than the existing plant. The existing geothermal well field is unchanged by the Project.

There would likewise be no change to any potential future geothermal development within the Hot Creek Buffer Zone as a result of the proposed General Plan ~~Amendment~~clarification. As noted, the change adds clarifying language but does not alter existing requirements. Such future development would continue to be subject to the setback requirements of Section 15.070, including the applicable variance provisions of Chapter 33. No potentially significant impact would be associated with the potential granting of a variance from those setbacks for any future project within the Hot Creek Buffer Zone for the following reasons:

RDEIR2 Document Revision 16: The text in the second bulleted paragraph on page 35 of the RDEIR2 has been revised as follows:

- The Casa Diablo area referenced in the General Plan Conservation/Open Space Element consists of the 90 acres of land owned by Ormat and under geothermal lease to MPLP on which the project site would be located and an adjacent approximately 194-acre parcel owned by the Los Angeles Department of Water and Power (LADWP). As illustrated on Figure 39 (see also FEIR Drawing 1), the LADWP parcel contains areas sufficient to accommodate geothermal development and processing facilities outside of the 500-foot setback from the blue-line stream channel (and more than 100 feet from exterior property lines). Thus, a variance under Chapter 33 would not be required or authorized in order to approve a future geothermal development project on the LADWP parcel. As is discussed in Section 2.2.1 of the RDEIR, no feasible location for a geothermal development exists within the 90-acre Ormat/MPLP parcel other than the site upon which the Project is being proposed.

RDEIR2 Document Revision 17: The text in the last paragraph on page 35 of the RDEIR2 has been revised as follows:

Thus, the proposed clarifying General Plan ~~Amendment~~ revision would not result in a significant impact to the environment, nor would it cause or increase any environmental impact associated with the Project or with any other project or activity in Mono County or within the Hot Creek Buffer Zone. Rather, it clarifies the existing meaning and intent of the General Plan, and preserves the setbacks imposed by section 15.070(B)(1), along with the variance procedure for any future project involving geothermal development within the Hot Creek Buffer Zone.

RDEIR2 Document Revision 18: The “Site Reclamation” paragraph on page 37 of the RDEIR2 has been revised as follows:

At the end of the Project life, all M-1 replacement plant facilities would be removed and the site would be restored to a natural condition consistent with the Reclamation Plan requirements approved by Mono County (see Appendix L). No impact related to land use planning would occur as a result of site restoration.

RDEIR2 Document Revision 19: The final paragraph on page 38 of the RDEIR2 has been revised as follows:

Under the No Project Alternative the existing MP-I power plant would continue to operate. There would be no new plant site construction and there would be no new impact on land use planning in the existing Casa Diablo geothermal development area. However, because the existing MP-I power plant is located approximately 200 feet closer to the mapped ephemeral blue-line stream, the proposed Project would ultimately result in a smaller power plant encroachment into the 500-foot setback than currently exists. The existing MP-I plant lacks a reclamation plan for post-operation site restoration.

RDEIR2 Document Revision 20: The note and sub-heading at the top of page 39 of the RDEIR2 has been revised as follows:

[The only change to Chapter 5 (Cumulative Effects) of the RDEIR was addition of the following Section ~~5.3.10~~ 5.2.9 (Land Use/Planning) to the RDEIR, as follows.]

~~5.3.10~~ 5.2.9 Land Use/Planning

RDEIR2 Document Revision 21: The bullet list on page 39 of the RDEIR2 has been revised as follows:

- A Conditional Use Permit for the M-1 replacement plant (including the granting of a height exception for mechanical appurtenances) and decommissioning/reuse of the existing MP-I plant site as a storage area;
- A Variance for setback reductions from property line(s); setback reductions from streams designated by a blue line on USGS topographic maps for structures within the 5.7-acre proposed M-1 plant site; and for the conversion of the existing MP-I plant site to a storage area;
- A Variance to construct an aboveground electrical transmission line; and
- ~~Clarifying General Plan Amendments.~~

RDEIR2 Document Revision 22: The following text has been deleted from the fifth column of the “Land Use/Planning” row in Table 34 on page 44 of the RDEIR2:

~~4: The County would approve clarifying General Plan Amendments.~~

3.3 Revisions Resulting from Public Comments on the RDEIR2

The following revisions to the text of the RDEIR2 resulting from public comments received on the RDEIR2 have been made as described in the Responses to Comments section of this Final Environmental Impact Report (FEIR).

RDEIR2 Revision 1: The following ministerial correction was made to the section numbering which resulted from the addition of the new Land Use/Planning sections to the RDEIR2:

Section ~~5.3.10 Land Use/Planning~~ was corrected to Section **5.2.9 Land Use/Planning**;
and

RDEIR2 Revision 2: The following text was inadvertently included in the new Land Use/Planning section of the RDEIR2 and was deleted from the bulleted list of required approvals for the Project on Page 29 of the RDEIR2:

- ~~Clarifying General Plan Amendments;~~

RDEIR2 Revision 3: New clarifying text was added to the second bulleted paragraph on Page 35 of the RDEIR2, as follows:

- The Casa Diablo area referenced in the General Plan Conservation/Open Space Element consists of the 90 acres of land owned by Ormat and under geothermal lease to MPLP on which the project site would be located and an adjacent approximately 194-acre parcel owned by the Los Angeles Department of Water and Power (LADWP). As illustrated on Figure 39, the LADWP parcel contains areas sufficient to accommodate geothermal development and processing facilities outside of the 500-foot setback from the blue-line stream channel (and more than 100 feet from exterior property lines). None of the possible geothermal power plant sites shown on the LADWP land has the same constraints as those identified on the existing Casa Diablo geothermal complex project site. Specifically, they do not contain steep slopes, Alquist-Priolo fault zones or hot springs/fumaroles. Nor are there other constraints that would affect or limit development on the building sites shown on Figure 39. Thus, a variance under Chapter 33 would not be required in order to approve a future geothermal development project on the LADWP parcel. As is discussed in Section 2.2.1 of the RDEIR, no feasible location for a geothermal development exists within the 90-acre Ormat/MPLP parcel other than the site upon which the Project is being proposed.

4 MITIGATION MONITORING AND REPORTING PROGRAM

4.1 Purpose

This section lists all mitigation measures contained in the Draft EIR prepared for the proposed Mammoth Pacific I (MP-I) Replacement Project (Project) as revised and supplemented by the RDEIR and RDEIR2. The mitigation measures are provided in the format of a Comprehensive Mitigation Monitoring and Reporting Program. This Program complies with State Public Resources Code §21086.6 which requires public agencies approving a Project under CEQA to establish a program for monitoring and reporting on the adopted mitigation plan.

4.2 Adoption of Mitigation Measures

As part of deliberations concerning the proposed Project, the Mono County Planning Commission will be required to consider adoption of the mitigation measures listed herein. If the Planning Commission approves the MP-I Replacement Project, they will also be required to specify whether these mitigation measures are to be formally incorporated as conditions of Project approval.

4.3 Monitoring and Reporting Procedures

The Mono County Planning Commission will be responsible for ensuring that all adopted mitigation measures are implemented in the manner outlined in this Program. County staff will be responsible for ensuring that mitigation measures are satisfactorily monitored, and for reporting to the Planning Commission regarding progress in fulfilling the mitigation obligations. The Planning Commission, acting on behalf of the residents of Mono County, will in turn be responsible for considering the reports submitted by staff, and determining whether the measures are being implemented and enforced as intended in this Mitigation Monitoring and Reporting Program. It will be the responsibility of the Planning Commission to amend these mitigation measures if necessary to achieve the environmental protections herein.

4.4 Regulatory Code and Compliance Standards

The Project will be subject to a number of uniform code requirements and standard conditions of approval. Many of these requirements have been established to safeguard environmental resources, and/or to promulgate environmental goals and objectives. If the proposed MP-I Replacement Project is approved, compliance with these uniform regulations will be mandatory (not discretionary). Such regulations do not conform to the strict definition of mitigation. Although regulatory standards and codes are not necessarily incorporated into this mitigation program, the Project will be required to comply fully with all relevant regulatory and code compliance standards.

4.5 Compilation of Mitigation Measures

The following mitigation measures are proposed to eliminate, avoid, or reduce potential environmental effects of the MP-I Replacement Project that have been found to be potentially substantial and adverse. These compiled measures will be required as Mono County Conditions of Approval.

*Mammoth Pacific I Replacement Project
Final EIR*

**MAMMOTH PACIFIC I REPLACEMENT PROJECT
MITIGATION IMPLEMENTATION AND MONITORING PROGRAM AND FORM
State Clearinghouse #2011022020**

Project Approval Date: _____ **Project File Number:** _____

The following measures have been adopted by Mono County (MC). As such, these measures represent formal conditions of approval of the Use Permit for the Mammoth Pacific I (MP-I) Replacement Project. Some of the measures were proposed as part of the Project by Mammoth Pacific L.P. (Applicant) and some of the measures were recommended environmental protection and mitigation measures in the Revised Draft EIR prepared for the Project. Unless explicitly stated otherwise, the Applicant and the MP-I Plant Operator shall be responsible for implementing these measures. The County and other identified responsible agencies shall be responsible for monitoring and reporting progress on these measures until all measures are fulfilled in accordance with their original purpose and intent as determined by the Mono County Planning Commission. This monitoring form shall be available for public review and inspection, and the final project clearance shall require that all verifications included in this form have been satisfactorily completed.

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
General Conditions				
1	Applicant shall conform to the Project Description described in the Revised Draft EIR prepared for the Project. Any proposed revisions to the Project Description must be approved by Mono County.	Design, Construction and Operations	MC Department of Public Works, MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor Throughout the Project Lifetime
2	The startup operating transition period during which both the proposed M-1 plant power generation facilities and the existing MP-I plant power generation facilities may operate at the same time shall be a maximum of two years from the date that the proposed M-1 plant begins startup operations of any kind.	Construction and Startup Operating Transition Period	MCEDD and MCCDD Planning Division	Confirm and Document During Startup Operating Transition Period

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
3	The rate of geothermal fluid production supplying the Casa Diablo geothermal complex during the startup operating transition period during which both the proposed M-1 power generation facilities and the existing MP-I plant power generation facilities may operate at the same time shall not exceed the existing geothermal fluid flow capacity of 6,900,000 pounds per hour.	Construction and Startup Operating Transition Period	CDOGGR, MCEDD and MCCDD Planning Division	Confirm and Document During Startup Operating Transition Period
Aesthetics:				
4	<u>Aesthetics Design Feature 1</u> : Power plant lighting shall be projected downward to mitigate nighttime visibility of the facilities.	Design, Construction and Operations	MCCDD	Confirm and Document During Design Approval
5	<u>Aesthetics Design Feature 2</u> : An Outdoor Lighting Plan shall be prepared and implemented for the M-1 plant site in conformance with the Mono County Dark Sky Regulations.	Design	MCCDD	Confirm and Document During Design Approval
6	<u>Aesthetics Design Feature 3</u> : The M-1 facility structures shall be painted in an earth-tone greenish color similar to the existing plants to help blend into the background.	Prior to the End of Construction	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Operations
7	<u>Aesthetics Design Feature 4</u> : The large pine tree in the southwest corner of the M-1 plant shall be saved to provide some visual screening of the plant site.	Design and Construction	MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor During Site Construction
8	<u>Aesthetics Design Feature 5</u> : Items to be stored within the equipment storage area constructed on the decommissioned MP-I plant site shall be restricted to a maximum height of 15 feet.	Operations	MCEDD and MCCDD Planning Division	Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
9	<u>Aesthetics Design Feature 6</u> : The selected interconnection transmission line option(s) from the M-1 plant site to the existing utility distribution line shall be constructed near ground level to minimize the visibility of the interconnection transmission line.	Prior to the End of Construction	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Plant Operations
10	<u>Aesthetics Protection Measure 1</u> : A Landscape Plan shall be prepared to provide visual screening of views of the proposed storage yard to be created in the footprint of the existing MP-I plant site, particularly along the southwestern and southeastern edges of the facility. The Landscape Plan shall be designed to achieve applicable standards set forth in Section 08.010 through 08.060 (Scenic Combining District and State Scenic Highway) of the Mono County General Plan Land Use Element and shall be approved by the County prior to the required decommissioning of the MP-I plant site. Visual screening alternatives could include installing metal slats in the chain link fence; installing and maintaining native vegetation consisting of such species as Jeffery pine, bitterbrush, and sagebrush; or other measures consistent with achieving the applicable County standards.	Prior to the End of Construction	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Plant Operations
Air Quality:				
11	<u>Air Quality Design Feature 1</u> : An Authority to Construct permit for the new power plant shall be obtained from the Great Basin Unified Air Pollution Control District (GBUAPCD).	Prior to Construction	GBUAPCD, MCEDD and MCCDD Planning Division	Confirm and Document Prior to Site Construction
12	<u>Air Quality Design Feature 2</u> : Permits to Operate the diesel fueled emergency generator and firewater pump generator shall be obtained from the GBUAPCD.	Prior to Construction	GBUAPCD, MCEDD and MCCDD Planning Division	Confirm and Document Prior to Generator Operations
13	<u>Air Quality Design Feature 3</u> : A vapor recovery unit (VRU) shall be used to capture motive fluid that could otherwise be released during plant maintenance.	Design and Operations	GBUAPCD and MC Department of Public Works	Confirm and Document During Design Approval

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
14	<p><u>Air Quality Design Feature 4</u>: The Applicant shall implement the following measures to reduce fugitive dust emissions from the Project:</p> <ul style="list-style-type: none"> • Restrict surface disturbance to the area within the proposed site grading plan; • Routinely water disturbed surfaces and building materials; • Limit maximum construction vehicle speeds to 15 miles per hour (mph); • Restrict construction activities during periods of high wind (i.e., greater than 25 mph); • Water or cover all materials transported onto or off of the construction site; • Pave the plant maintenance road; and • Cover all unpaved plant site surfaces with gravel after final grading. 	Construction	GBUAPCD, MCEDD and MCCDD Planning Division	Confirm and Document Prior to Site Construction and Monitor During Site Construction
Biological Resources:				
15	<p><u>Bio Design Feature 1</u>: The M-1 plant site shall drain to a subsurface retention basin. Overflow from this basin shall drain via sheet flow to the surface for percolation.</p>	Design and Construction	MC Public Works Department	Confirm and Document During Design Approval
16	<p><u>Bio Design Feature 2</u>: Short-term and long-term erosion control and stormwater construction best management practices (BMP) shall be integrated into the interim site reclamation plan for the MP-I plant site.</p>	Prior to MP-I Decommissioning	MC Public Works Department	Confirm and Document During Design Approval
17	<p><u>Bio Design Feature 3</u>: M-1 plant site construction BMP shall be implemented, including: placement of straw wattles and/or silt fencing along the perimeter of the site, and around topsoil stockpiles; and placement of silt fences in drainage swales at the exit point of the site.</p>	Design and Construction	MC Public Works Department	Confirm and Document During Design Approval

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
18	<u>Bio Design Feature 4</u> : M-1 plant site post-construction BMP shall also be implemented, including: the use of erosion control blankets and hydroseeding of slopes created by grading outside of the plant site; the placement of ¾” rock placed in all areas of the plant site that are not covered by pavement or structural concrete; and rock filled trench drains and retention facilities shall provide desiltation of storm water runoff.	Operations	MC Department of Public Works, MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor Throughout the Project Lifetime
19	<u>Bio Design Feature 5</u> : The on-site construction vehicle maximum speed limit shall be limited to 15 miles per hour (mph) to, in part, reduce the potential for vehicle impacts with wildlife during construction activities.	Construction	GBUAPCD, MCEDD and MCCDD Planning Division	Monitor During Site Construction
20	<u>Bio Design Feature 6</u> : All noise creating construction activities shall be limited to daylight hours; noise levels during construction activities shall be kept to a minimum by equipping all on-site equipment with noise attenuation devices; and the M-1 plant site facilities shall operate at lower noise levels than those of the existing MP-I plant to, in part, reduce the impacts from noise on wildlife.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
21	<u>Bio Design Feature 7</u> : The M-1 plant site shall be designed and constructed to prevent spills from leaving the site and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments; a system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained for the M-1 plant site facilities; the proposed M-1 plant site shall be integrated into the existing <i>Geothermal Brine Spill Prevention and Response Plan</i> prepared for the Casa Diablo geothermal complex; and a <i>Spill Prevention, Control and Countermeasure Plan</i> (SPPC Plan) shall be prepared for the plant site and integrated into the existing program for hazardous material management and emergency response at the Casa Diablo geothermal complex to, in part, reduce the potential for adverse offsite effects on biological resources from spills of geothermal fluid, petroleum hydrocarbons, or hazardous substances from the M-1 plant site.	Prior to and During Operations	MC Department of Public Works, Environmental Health, MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
22	<u>Bio Design Feature 8</u> : Removal of existing pine trees located off of the M-1 plant site shall be avoided in the placement of the interconnection injection pipeline to minimize impacts on offsite vegetation and wildlife habitat.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
23	<u>Bio Mitigation Measure 1</u> : The MP-I Project shall be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant.	Operations	MCEDD, MCCDD Planning Division and the LVHAC	Monitor Throughout the Project Lifetime
24	<u>Bio Protection Measure 2</u> : All above ground pipelines and transmission lines shall be installed using low pressure tracked equipment to minimize impacts on vegetation. Understory vegetation and organic horizon may be trampled during pipeline and transmission line installation but not removed. All Jeffrey pine trees in the installation routes outside of the footprint of the M-1 replacement plant site shall be preserved. All interconnection transmission line and pipeline installation routes outside of the footprint of the M-1 replacement plant site shall be revegetated during the October following the respective pipeline or transmission line installations by seeding with a [seed mix – scrub] approved by the County which emphasizes bitterbrush.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
25	<p><u>Bio Protection Measure 3:</u> A post M-1 plant site construction Revegetation Plan shall be prepared and submitted to the County. The Revegetation Plan shall specify that topsoil at the M-1 pad site, defined as organic litter and mineral soil to a depth of 10 inches, shall be stockpiled at the SCE easement edge. This topsoil shall be spread to enhance the revegetation areas. The revegetation shall include all pad edges, fill slopes, and areas disturbed by equipment, except the very small areas mapped as thermally disturbed (i.e., the pre-project condition is already devegetated). Revegetation areas shall be seeded and the seed immediately raked in during the first October following construction, using [seed mix – scrub]. After seed is broadcast, the revegetation area shall be mulched using shrubs and forest materials retained from the M-1 pad construction area. Once seeding and mulching have been completed, the revegetation areas shall be kept off-limits to vehicles except in emergency. Revegetation goals are: (1) eight native perennial grasses and four native shrubs per 4-square-meter quadrat (average of five quadrats per revegetation area), in all areas except those mapped as thermally disturbed; and (2) no populations of new non-native species (i.e., species that were present at Casa Diablo pre-project are allowed). If after 3 years goal (1) is not met, then new seeding and mulching is required. If at any time a new non-native population occurs, then eradication is required.</p>	Post-Construction	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Plant Operations and Monitor Until Revegetation Goals are Successful
26	<p><u>Bio Protection Measure 4:</u> Patches totaling about 7.2 acres of high quality Wright Buckwheat Dwarf Scrub habitat have been mapped on the private land northeast of the M-1 plant site. The Applicant shall protect this habitat from further development and mechanical disturbance and designate the mapped area for long-term preservation in the Reclamation Plan prepared for the County for the Casa Diablo geothermal development.</p>	Design, Construction and Operations	MCEDD and MCCDD Planning Division	Require Revision of the Reclamation Plan and Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
27	<u>Bio Protection Measure 5:</u> During the seasonal bird nesting period from February 15 th through September 15 th , a nesting bird survey shall be undertaken by a qualified biologist within the 7-day period prior to commencing (or recommencing if activities stop longer than 7 days) construction activities on the M-1 plant site. If nesting birds are observed on or within 100 feet of the proposed M-1 plant site, then the CDFG shall be notified and surface disturbance within 100 feet of the nesting birds shall be postponed until a qualified biologist advises that fledging has occurred.	Pre-Construction	MCEDD, MCCDD Planning Division and CDFG	Confirm and Document Prior to Site Construction
28	<u>Bio Protection Measure 6:</u> A nesting bird survey shall be undertaken by a qualified biologist within the 7-day period prior to beginning decommissioning of the existing MP-I power generation superstructure. If nesting birds are observed on the existing MP-I power generation superstructure, then the CDFG shall be notified and decommissioning activities shall be postponed until a qualified biologist advises that fledging has occurred.	Pre-Construction	MCEDD, MCCDD Planning Division and CDFG	Confirm and Document Prior to Site Construction
29	<u>Bio Protection Measure 7:</u> The Project shall not erect any linear barriers to movement of deer or other wildlife in the area between the existing MP-I plant site and the replacement M-1 plant site. During M-1 plant site construction, no temporary fencing or pipeline racks shall be erected in this same area during the normal periods of mule deer migration, from April 1 st to May 30 th or from September 15 th through November 15 th .	Design and Construction	MCEDD, MCCDD Planning Division and CDFG	Confirm and Document During Site Construction
30	<u>Bio Protection Measure 8:</u> A new deer crossing shall be constructed over the existing pipeline rack between the existing MP-I plant site and the replacement M-1 plant site to enhance mule deer and other wildlife movement through the Project area. The crossing shall be approximately 30 feet wide and shall be located near the 90 degree turn in the pipeline from east-west to north-south (at about 37.64590°N, -118.91358°W). The crossing shall be earthen filled over the pipeline rack. The new fill slopes, the earthen top, and the adjacent disturbed area shall be revegetated using [seed mix – scrub] and Jeffrey pines on 20-foot centers. The finished crossing shall resemble the existing crossing at the SCE easement located approximately 320 feet east of the 90 degree turn.	Design and Construction	MCEDD, MCCDD Planning Division and CDFG	Confirm and Document During Design Approval and Post-Construction

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
31	<p><u>Bio Protection Measure 9</u>: The mule deer movement corridor identified on the northeastern side of the existing Casa Diablo geothermal complex shall be maintained free from further development and mechanical disturbance to provide continuing wildlife movement through the Casa Diablo area. This area generally coincides with the patches of Wright Buckwheat Dwarf Scrub community referenced in Bio Protection Measure 4, and the adjacent three acres of Singleleaf Pinyon Woodland, and one acre of Jeffrey Pine Forest. The Applicant shall protect this movement corridor from further development and mechanical disturbance and designate the mapped area for long-term preservation in the Reclamation Plan prepared for the County for the Casa Diablo geothermal development.</p>	Design, Construction and Operations	MCEDD and MCCDD Planning Division	Require Revision of the Reclamation Plan and Monitor Throughout the Project Lifetime
32	<p><u>Bio Protection Measure 10</u>: All operational waste facilities shall be located within exclusion fences of at least six feet in height to avoid attracting potential predators (i.e., including bears, coyotes, and ravens) to the area. Gates shall be kept closed if a waste facility is present. All waste receptacles shall be fitted with bear-proof lids. The lids shall be kept closed, and waste receptacle lid-closure shall be added to the standard plant operating protocol. Visiting contractors shall be made aware of the importance of proper waste disposal within the Project area.</p>	Operations	MCEDD and MCCDD Planning Division	Monitor Throughout the Project Lifetime
33	<p><u>Bio Protection Measure 11</u>: Construction lighting shall be shielded away from the area located between the existing MP-I plant site and the replacement M-1 plant site. Operational lighting located along the northern, western, and southern boundaries of the replacement M-1 plant site; and the eastern and southern boundaries of the new MP-I storage yard, shall be shielded and directed downward or inward away from deer movement corridors.</p>	Design and Construction	MC Department of Public Works	Confirm and Document During Design Approval
34	<p><u>Bio Protection Measure 12</u>: The operational vehicle speed limit in the Project area shall be posted and restricted to a maximum 15 miles per hour to minimize the potential for vehicle impacts on wildlife. Distractions such as using electronic devices, cell phones, etc. shall be prohibited in moving vehicles in the Casa Diablo area. Visiting contractors shall be made aware of the wildlife collision avoidance rules.</p>	Operations	MCEDD and MCCDD Planning Division	Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
35	<u>Bio Protection Measure 13</u> : To avoid harassment of wildlife or take of special status wildlife species, all dogs brought into the Project area shall be kept on leash unless they are brought into the fenced MP-I plant site or fenced M-1 replacement plant site areas and the gates are closed. Contractors shall be informed of the requirement that dogs be leashed and gates closed.	Operations	MCEDD and MCCDD Planning Division	Monitor Throughout the Project Lifetime
36	<u>Bio Protection Measure 14</u> : All constructed basins in the Project area shall have finished slopes of 1:3 or less for at least 10 percent of the basin perimeter, with no less than one such slope every 100 feet of perimeter to facilitate wildlife escape from the basins. This may be accomplished by constructing ramp-like slopes or by piling dirt inside the basins at the required slope and interval.	Design and Construction	MC Department of Public Works	Confirm and Document During Design Approval
37	<u>Bio Protection Measure 15</u> : A biological survey for amphibians shall be conducted of the existing pond on the MP-I plant within the 7-day period prior to demolition of the pond. The CDFG shall be notified if any amphibian populations are discovered during the survey. The CDFG shall be allowed to determine whether relocation or extermination of the amphibian species is indicated.	Pre-Construction	MCEDD, MCCDD Planning Division and CDFG	Confirm and Document Prior to Pond Demolition
38	<u>Bio Protection Measure 16</u> : All perchable pole tops greater than 20 feet in height located near the southern boundary of the M-1 plant site abutting undisturbed native scrub habitat, shall be fitted with passive raptor and raven perching deterrents (e.g., Nixalite® bird spikes or equivalent). Any accumulations of raptor or raven droppings on M-1 plant site structures would trigger expanding the passive raptor and raven perching deterrents to the affected structure(s). No new potential perches of 20-foot in height or greater shall be authorized in the new MP-I storage yard following decommissioning activities.	Design, Construction and Operations	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Operations and Monitor Throughout the Project Lifetime
Cultural Resources				
39	<u>Cultural Design Feature 1</u> : The Applicant shall implement all environmental protection measures to reduce the adverse effects of the Project on cultural resources that were recommended in the baseline cultural resources survey reports prepared for the Project area.	Construction	MCEDD and MCCDD Planning Division	Confirm and Document During Site Grading

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
40	<u>Cultural Protection Measure 1</u> : In the unlikely event that human remains are encountered during the construction phase of the project, excavation activities shall be stopped and the County Coroner must be contacted. If the County Coroner determines that the remains are those of Native Americans, the Native American Heritage Commission (NAHC) must be contacted within 24 hours and a Most Likely Descendant will be assigned to consult with the County to develop an agreement for the treatment and disposition of the remains.	Construction	MCEDD, MCCDD Planning Division and NAHC	Confirm and Document During Site Grading
Geology and Soils				
41	<u>Geo Design Feature 1</u> : Applicant shall implement those measures recommended in the report of the geotechnical investigation of the site to mitigate impacts due to geotechnical, soils and geologic constraints.	Design and Construction	MC Public Works Department	Confirm and Document During Design Approval
42	<u>Geo Design Feature 2</u> : All buildings and structures shall be constructed to meet applicable earthquake safety codes and the 2010 Uniform Building Code adopted by Mono County.	Design and Construction	MCCDD	Confirm and Document During Design Approval
Hazards and Hazardous Materials				
43	<u>HazMat Design Feature 1</u> : The power plant site shall be designed and constructed to prevent spills from leaving the site and endangering adjacent properties and waterways, and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments.	Design and Construction	MC Public Works Department, Environmental Health	Confirm and Document Prior to Operations
44	<u>HazMat Design Feature 2</u> : A system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained.	Design, Construction and Operations	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Operations and Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
45	<u>HazMat Design Feature 3</u> : The existing program for hazardous material management and emergency response at the Casa Diablo geothermal complex shall be expanded to include the M-1 plant site and operations, including: (a) the existing Spill Pollution Control and Countermeasure (SPCC) Plan; (b) the California Accidental Release Prevention (CalARP) Program; (c) the EPA Risk Management Plan (RMP); and (d) the OSHA Process Safety Management (PSM) Program to include the new M-1 plant.	Design, Construction and Operations	MCEDD, MCCDD Planning Division and MC Health Department, Environmental Health Division	Confirm and Document Prior to Operations and Monitor Throughout the Project Lifetime
46	<u>HazMat Design Feature 4</u> : The existing program for fire prevention and suppression at the Casa Diablo geothermal complex shall be amended and integrated to include the M-1 replacement plant facilities and operating procedures.	Design, Construction and Operations	Long Valley Fire Protection District (LVFPD)	Confirm and Document Prior to Operations and Monitor Throughout the Project Lifetime
47	<u>HazMat Design Feature 5</u> : No hazardous materials, chemicals, or wastes shall be stored in the new storage yard constructed in the footprint of the decommissioned MP-I plant site.	Operations	MCEDD, Environmental Health and MCCDD Planning Division	Monitor Throughout the Project Lifetime
Hydrology and Water Quality				
48	<u>Hydro Design Feature 1</u> : The M-1 plant site shall drain to a subsurface retention basin. Overflow from this basin shall drain via sheet flow to the surface for percolation.	Design and Construction	MC Public Works Department	Confirm and Document Prior to Operations
49	<u>Hydro Design Feature 1</u> : Short-term and long-term erosion control and stormwater construction best management practices (BMPs) shall be integrated into the interim site reclamation plan for the MP-I plant site.	Construction and Operations	MC Public Works Department and Lahontan RWQCB	Confirm and Document Prior to Construction and Operations, Respectively

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
50	<u>Hydro Design Feature 3</u> : M-1 plant site construction BMPs shall be implemented, including: placement of straw wattles and/or silt fencing along the perimeter of the site, and around topsoil stockpiles; and placement of silt fences in drainage swales at the exit point of the site.	Construction	MC Public Works Department and Lahontan RWQCB	Confirm and Document Prior to Construction
51	<u>Hydro Design Feature 4</u> : M-1 plant site post-construction BMPs shall also be implemented, including: the use of erosion control blankets and hydroseeding of slopes created by grading outside of the plant site; the placement of ¾” rock placed in all areas of the plant site that are not covered by pavement or structural concrete; and rock filled trench drains and retention facilities shall provide desiltation of storm water runoff.	Post-Construction	MC Public Works Department and Lahontan RWQCB	Confirm and Document Prior to Operations
52	<u>Hydro Design Feature 5</u> : The M-1 plant site shall be designed and constructed to prevent spills from leaving the site and to prevent runoff from any source being channeled or directed in an unnatural way so as to cause erosion, siltation, or other detriments; a system of pressure and flow sensing devices and regular inspection of all lines, capable of detecting leaks and spills, shall be instituted and maintained for the M-1 plant site facilities; the proposed M-1 plant site shall be integrated into the existing <i>Geothermal Brine Spill Prevention and Response Plan</i> prepared for the Casa Diablo geothermal complex; and a <i>Spill Prevention, Control and Countermeasure Plan</i> (SPPC Plan) shall be prepared for the plant site and integrated into the existing program for hazardous material management and emergency response at the Casa Diablo geothermal complex to, in part, reduce the potential for adverse offsite effects on water resources from spills of geothermal fluid, petroleum hydrocarbons, or hazardous substances from the M-1 plant site.	Design, Construction and Operations	MC Public Works Department, MC Health Department, Environmental Health Division and Lahontan RWQCB	Confirm and Document During Design Approval and then Monitored Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
53	<u>Hydro Design Feature 6</u> : No element of the project construction shall result in the alteration of the blue-line drainage channel, or discharge of fill material into, the blue-line drainage channel that crosses the site between the existing MP-I and proposed M-1 plant sites, adjacent to Old Highway 395. Prior to commencement of construction, the Applicant shall provide to the County the proposed engineering design for the road crossing which demonstrates to the County that no impact to this drainage channel would occur as a result of project construction.	Design and Construction	MC Department of Public Works, MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor Through Construction
54	<u>Hydro Mitigation Measure 1</u> : Headwalls and sluice gates constructed on culverts draining the Casa Diablo geothermal complex to provide area-wide emergency spill containment and prevent surface drainage from escaping the area shall be inspected and maintained routinely.	Operations	MC Public Works, Environmental Health Department and Lahontan RWQCB	Confirm and Document During Design Approval and then Monitored Throughout the Project Lifetime
55	<u>Hydro Mitigation Measure 2</u> : All geothermal fluid, petroleum product, and hazardous substance spill containment and emergency response plans proposed for the Project shall be maintained current throughout the life of the Project.	Operations	MCEDD, MCCDD Planning Division and MC Health Department, Environmental Health Division	Monitor Throughout the Project Lifetime
23* [Restated]	<u>Hydro Mitigation Measure 3</u> : The MP-I Project shall be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant.	Operations	MCEDD, MCCDD Planning Division and the LVHAC	Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
Noise				
56	<u>Noise Design Feature 1</u> : All noisy construction activities shall be limited to daylight hours.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
57	<u>Noise Design Feature 2</u> : Noise levels during construction activities shall be kept to a minimum by equipping all on-site equipment with noise attenuation devices.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
58	<u>Noise Design Feature 3</u> : All project construction activities and normal operations shall comply with applicable County noise requirements.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
Land Use/Planning				
5** [Restated]	<u>Land Use/Planning Design Feature 1</u> : An Outdoor Lighting Plan shall be prepared and implemented for the M-1 plant site in conformance with the Mono County Dark Sky Regulations.	Design	MC Public Works Department	Confirm and Document During Design Approval
42** (Restated)	<u>Land Use/Planning Design Feature 2</u> : All buildings and structures shall be constructed to meet applicable earthquake safety codes and the 2010 Uniform Building Code adopted by Mono County.	Design and Construction	MCCDD	Confirm and Document During Design Approval
53*** [Restated]	<u>Land Use/Planning Design Feature 3</u> : No element of the project construction shall result in the alteration of the blue-line drainage channel, or discharge of fill material into, the blue-line drainage channel that crosses the site between the existing MP-I and proposed M-1 plant sites, adjacent to Old Highway 395. Prior to commencement of construction, the Applicant shall provide to the County the proposed engineering design for the road crossing which demonstrates to the County that no impact to this drainage channel would occur as a result of project construction.	Design and Construction	MC Department of Public Works, MCEDD and MCCDD Planning Division	Confirm and Document During Design Approval and Monitor Through Construction

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
58** [Restated]	<u>Land Use/Planning Design Feature 4</u> : All project construction activities and normal operations shall comply with applicable County noise requirements.	Construction	MCEDD and MCCDD Planning Division	Monitor During Site Construction
10** [Restated]	<u>Land Use/Planning Protection Measure 1</u> : A Landscape Plan shall be prepared to provide visual screening of views of the proposed storage yard to be created in the footprint of the existing MP-I plant site, particularly along the southwestern and southeastern edges of the facility. The Landscape Plan shall be designed to achieve applicable standards set forth in Section 08.010 through 08.060 (Scenic Combining District and State Scenic Highway) of the Mono County General Plan Land Use Element and shall be approved by the County prior to the required decommissioning of the MP-I plant site. Visual screening alternatives could include installing metal slats in the chain link fence; installing and maintaining native vegetation consisting of such species as Jeffery pine, bitterbrush, and sagebrush; or other measures consistent with achieving the applicable County standards.	Prior to the End of Construction	MCEDD and MCCDD Planning Division	Confirm and Document Prior to Plant Operations

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
Cumulative Effects				
59	<p><u>Cumulative Bio Mitigation Measure 1:</u> Constraints to wildlife movement through the Casa Diablo Hot Springs area shall be evaluated as part of any new development project proposed in the area. Measures shall be included as part of each new development project that would prevent the respective project from becoming a substantial obstacle to wildlife movement through or around the respective proposed development area. Mitigation measures to reduce cumulative impacts should be project specific, but examples of suggested measures to mitigate cumulative impacts include:</p> <ul style="list-style-type: none"> • Conducting baseline deer studies of proposed projects in the Casa Diablo Hot Springs area and monitoring deer use within and near a new proposed project. • Designing pipeline corridors or other potential physical obstacles to allow for deer and other wildlife movement such that dips, piled soil crossings or other proposed constructs to facilitate wildlife travel through identified major movement corridors are adopted as part of a new proposed project. • Requiring that proposed project lighting be shielded away from identified major deer and other wildlife movement corridors. 	Design, Construction and Operations	MCEDD, MCCDD Planning Division and/or the Responsible Federal Agency and CDFG	Review Baseline Surveys and Impacts on Wildlife Movement Prior to Decisions on Project Approval and Confirm and Document During Design Approval
60	<p><u>Cumulative Bio Mitigation Measure 2:</u> Water which may accumulate in geothermal well site basins from precipitation shall be removed to a standing depth of 2 inches from the respective basins on a daily basis or as soon as operationally feasible; and liquids deposited into the basins shall either be removed daily to a standing depth of 2 inches, or the basins shall be made wildlife escapable by creating earthen ramps at slopes of 1:3 or less at intervals of 100 feet apart or less around the perimeter of the standing depth of the liquid stored in the basin. Alternatives for providing equally effective measures which would allow wildlife to escape unharmed from the well site basins may be authorized subject to Mono County and CDFG approval.</p>	Operations	MCEDD, MCCDD Planning Division and/or the Responsible Federal Agency and CDFG	Confirm and Document During Design Approval

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
61	<p><u>Cumulative Bio Mitigation Measure 3</u>: All existing and future geothermal power plant projects in the Hot Creek buffer zone, or in the vicinity of Casa Diablo Hot Springs, shall be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D, as may be amended), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant.</p>	Operations	MCEDD, MCCDD Planning Division and/or the Responsible Federal Agency and the LVHAC	Require Monitoring and Remedial Action Program with Decisions on Respective Project Approval and Monitor Throughout the Project Lifetime
61* [Restated]	<p><u>Cumulative Hydro Mitigation Measure 1</u>: All existing and future geothermal power plant projects in the Hot Creek buffer zone, or in the vicinity of Casa Diablo Hot Springs, shall be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D, as may be amended), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant.</p>	Operations	MCEDD, MCCDD Planning Division and/or the Responsible Federal Agency and the LVHAC	Require Monitoring and Remedial Action Program with Decisions on Respective Project Approval and Monitor Throughout the Project Lifetime
61* [Restated]	<p><u>Cumulative Land Use/Planning Mitigation Measure 1</u>: All existing and future geothermal power plant projects in the Hot Creek buffer zone, or in the vicinity of Casa Diablo Hot Springs, shall be subject to the applicable hydrologic and biologic monitoring and remedial action program requirements set forth in the Mono County General Plan (Mono County General Plan, Conservation/Open Space Element, Energy Resources, Goal 1, Objectives C and D, as may be amended), including compliance with conditions addressing hydrologic monitoring and remediation contained in the existing Conditional Use Permit for the MP-II Geothermal Power Plant.</p>	Operations	MCEDD, MCCDD Planning Division and/or the Responsible Federal Agency and the LVHAC	Require Monitoring and Remedial Action Program with Decisions on Respective Project Approval and Monitor Throughout the Project Lifetime

*Mammoth Pacific I Replacement Project
Final EIR*

Number	Mono County Conditions of Approval	Schedule of Compliance	Monitoring Entity*	Verification Date
62	<u>Cumulative Aesthetics Protection Measure 1</u> : Applicable Mono County lighting standards shall apply to all projects in the Casa Diablo geothermal development complex.	Construction and Operations	MCEDD and MCCDD Planning Division	Confirm and Document During Respective Project Design Approval
63	<u>Cumulative Air Quality Protection Measure 1</u> : Vehicle speeds shall be restricted to a maximum speed of 15 miles per hour for project-related travel on all unpaved access roads. Vehicle speed limits shall be posted in conformance with applicable Mono County and/or U.S. Forest Service (USFS) requirements and restrictions.	Construction and Operations	MCEDD, MCCDD Planning Division and/or the BLM, USFS and GBUAPCD	Require with Decisions on Respective Project Approval and Monitor Throughout the Project Lifetime
<p>* The monitoring entities identified by abbreviation in these tabulated Conditions of Approval are as follows: BLM ≡ U.S. Department of Interior, Bureau of Land Management CDFG ≡ California Department of Fish and Game CDOGGR ≡ California Division of Oil, Gas and Geothermal Resources GBUAPCD ≡ Great Basin Unified Air Pollution Control District LVFPD ≡ Long Valley Fire Protection District LVHAC ≡ Long Valley Hydrologic Advisory Committee MCCDD ≡ Mono County Community Development Department MCEDD ≡ Mono County Economic Development Department RWQCB ≡ Lahontan Regional Water Quality Control Board USFS ≡ U.S. Department of Agriculture, Inyo National Forest</p>				