MITIGATION ACTION PLAN

FOR THE

EAST ALTAMONT POWER PLANT PROJECT

Prepared to Accompany DOE/EA-1411

Prepared by:
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June 2004

Acronyms and Abbreviations

ARMR	Archeological Resource Management Report
BBID	Byron Bethany Irrigation District
BO	Biological Opinion
BRMIMP	Biological Resources Mitigation Implementation and Monitoring Plan
CBO	Chief Building Official
CDFG	California Department of Fish and Game
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CPM	Compliance Project Manager
CRM	Cultural Resources Monitor
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CRR	Cultural Resources Report
CRS	Cultural Resources Specialist
DOE	U.S. Department of Energy
DPR	Department of Parks and Recreation
EA	Environmental Assessment
EAEC	East Altamont Energy Center (physical plant)
EAEC, LLC	East Altamont Energy Center, LLC (corporation)
EMF	Electrical and Magnetic Field
FONSI	finding of no significant impact
FSA	Final Staff Assessment
FWS	U.S. Fish and Wildlife Service
LORS	Laws, Ordinances, Regulations, and Standards
NEPA	National Environmental Policy Act
PAR	Property Assessment Report
RAS	Remedial Action Scheme
SHPO	State Historic Preservation Officer
SPS	Special Protection Systems
WEAP	Worker Environmental Awareness Program

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Introduction

East Altamont Energy Center, LLC (EAEC, LLC), a wholly owned subsidiary of Calpine Corporation, applied to the Department of Energy (DOE), Western Area Power Administration (Western) to interconnect the East Altamont Energy Center (EAEC), a 1100-megawatt (MW) natural gas-fired power plant, to Western's Tracy Substation. EAEC LLC intends to serve competitive regional markets in California with power from the EAEC. Western proposes to make modifications at its Tracy Substation to accommodate the interconnection. The EAEC is a merchant plant, which means that it would be independent of other generators and that the power generated would serve the open market rather than any particular utility or load. All financial responsibility for the EAEC would be borne by EAEC, LLC.

The Project would occupy 45 acres of a 174-acre parcel of land under the EAEC, LLC's control, located in unincorporated Alameda County, approximately 1 mile west of the San Joaquin County line and 1 mile southeast of the Contra Costa County line. EAEC LLC has obtained and will preserve in perpetuity 151 acres of mitigation land (referred to as the Gomes Farms property) located approximately one mile from the project site. The plant's cooling and process water requirements (averaging about 4,600 acre-feet per year) would be supplied with raw (i.e., untreated) water from the Byron Bethany Irrigation District (BBID) via a 2.1-mile pipeline. As the community of Mountain House is developed and recycled water becomes available, BBID would be able to serve the facility with recycled water using a 4.6-mile recycled water line between the EAEC and the Mountain House Community Service District (MHCSD) wastewater treatment plant. The project employs a zero liquid discharge system to control wastewater so that there are no discharges of liquid waste from the EAEC.

Natural gas for the facility would be delivered via approximately 1.8 miles of new 20-inch pipeline that would connect to Pacific Gas and Electric's (PG&E) existing gas pipeline. From the project site, the pipeline would run south along Mountain House Road, turning west at Kelso Road, and then south along the eastern side of the Delta Mendota Canal to the PG&E main line. A fiberoptic cable would be buried between the EAEC and Western's Tracy Substation.

The Project would interconnect by means of two 0.5-mile double-circuit 230-kV lines to intercept Western's existing Tracy-Westley 230-kV double-circuit line (currently operating as a single circuit). The existing Tracy-Westley 230-kV double-circuit line would be reconfigured into two separate circuits that terminate at new bays 13 and 14 constructed at the 230-kV Tracy Substation and at new breaker-and-a-half bays constructed at the Westley Substation. For the interconnection, the EAEC would construct a new switchyard at the south end of the EAEC, which would be owned and operated by Western as an extension of the Tracy Substation. As proposed, new

electrical equipment would be installed within the existing boundaries of the Tracy and Westley substations.

Environmental Review

Western prepared an Environmental Assessment (EA) for the proposed project, pursuant to regulations of the Council on Environmental Quality (40 CFR Part 1500) and the Implementing Procedures of the Department of Energy (10 CFR Part 1021). The EA was prepared jointly with the California Energy Commission (CEC) and their environmental and engineering review of the proposal presented by the EAEC, LLC. The joint document, referred to as the Final Staff Assessment (FSA) and Final EA, was released to the public in September 2002. Western also prepared EA errata to address new or modified conditions of certification in the FSA/EA resulting from the evidentiary hearings held by the CEC in October 2002. Based on the Final EA and Western's EA errata, Western determined that, with the proposed mitigation, the EAEC will not result in any significant environmental impacts, and the preparation of an environmental impact statement will not be required. Western released a draft Finding of No Significant Impact (FONSI) for comment in March 2003.

The EA, Western's EA errata, and draft FONSI identified impacts that would occur as a result of the proposed project and detailed a series of conditions placed upon the actions of the EAEC, LLC that will mitigate those impacts. These conditions, referred to in the EA as Conditions of Certification, are actions that must be taken by the EAEC, LLC to reduce the severity of the project impacts, conform with existing regulations and standards of construction, or simply perform under the best environmental business practices. Subsequent to the draft FONSI, a number of revisions were made to the EAEC project Conditions of Certification from public comments provided on the draft CEC Presiding Member's Proposed Decision (PMPD) issued on January 29, 2003 and the Revised Presiding Member's Proposed Decision (RPMPD) issued on May 15, 2003. After review of a number of comments, the RPMPD was presented for adoption at the CEC's Business Meeting on July 23, 2003. Because of outstanding issues, the Committee developed a Supplemental Errata to address concerns discussed at the July Business meeting. The CEC issued its Final Decision on the EAEC on August 20, 2003, which includes the final Conditions of Certification placed upon the actions of the EAEC, LLC that will mitigate impacts. Western's responsibility for the various mitigations in the Final Decision is described in Appendix A.

Western conducted consultations with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) under Section 7 regulations (50 CFR 402) of the Endangered Species Act (6 USC Section 1536(a)(2)). With concurrence from the NMFS, a Biological Opinion was issued by the FWS on July 29, 2002 and docketed with the CEC on September 19, 2002. The Applicant also applied to the California Department of Fish and Game (CDFG) for a 2081 permit for state special status species affected by the project.

Western conducted consultations with the California State Historic Preservation Officer under Section 106 regulations (36 CFR 800) of the National Historic Preservation Act (16 U.S.C. 470) prior to issuing its final FONSI. Western is responsible for ensuring that terms and conditions of the Biological Opinion issued for the Project under Section 7 and the mitigation prescribed as part of Western's Section 106 consultation with the California State Historic Preservation Officer are implemented.

Scope of the Mitigation Action Plan

This Mitigation Action Plan (Plan) is intended to accompany the EA and the final FONSI. The purpose of this Plan is to facilitate the implementation of the mitigation actions that must be performed under Western's NEPA jurisdiction (Appendix B), and disclose other mitigation actions that would be monitored by Western and the CEC (Appendix C) to mitigate potentially significant impacts to less than significant.

Western has no responsibilities for the construction of the EAEC beyond the actual interconnection at Western's Tracy Substation. The EAEC, LLC proposes to interconnect the proposed EAEC to the Tracy Substation, which is under the jurisdiction of Western. Once construction is complete, Western would take over ownership and responsibility for operation of the transmission line. New electrical equipment would also be installed within the existing boundaries of the Tracy and Westley substations. Ownership and operation of the new switchyard, which would function as an extension of the Tracy Substation, would be transferred to Western after construction is complete.

Monitoring of the transmission line construction conditions and all conditions related to the power plant described in this Plan and in the EA will be accomplished by the compliance representative of the CEC, referred to in the EA as the Compliance Project Manager (CPM). Because the State of California has siting responsibilities for this Project, they assume the responsibility to require that all conditions that lead to the certification of the project are carried out. Western, however, will monitor the construction progress through contact with the CPM to determine that the EAEC, LLC meets Western's requirements. Western will not report to the CEC CPM but will maintain communication and cooperation with the CPM and other representatives of the CEC.

Contacts

This Plan has been prepared in accordance with DOE Implementing Procedures [10 CFR 1021.331(b)]. The information contained in the Plan has been summarized. The site-specific mitigation measures are listed in Appendix A. The EA, Western's EA Errata, and the East Altamont Energy Center Application for Certification: Final Commission Decision" (Final Decision) approved August 20, 2003 should be reviewed along with this Plan to better understand the mitigation measures listed in the Appendices. Additional information and copies of the EA, Western's EA Errata, and the FONSI may be obtained from the persons named below or viewed on the Western web site at www.wapa.gov. The Final Decision is available on the CEC website at

www.energy.ca.gov/sitingcases/eastaltamont/documents/2003-08-20_FINAL_DECISION.PDF.

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Reporting

Western will submit annual reports to DOE's Office of NEPA Policy and Compliance, EH-42, in accordance with DOE Order 451.1B, National Environmental Policy Act Compliance Program. This reporting will begin with the first Annual Site Environmental Report prepared after the onset of construction activities and will address the status of the conditions of certification and any changes associated with them. This reporting will continue annually until all conditions have been met.

References

California Energy Commission and Western Area Power Administration. September 19, 2002, Updated October 2, 2002. "Final Staff Assessment." Available at: http://www.energy.ca.gov/sitingcases/eastaltamont/documents/2002-10-02_FSA.PDF

California Energy Commission. October 10, 2002. Staff Status Report on Workshops and 2nd Errata to the FSA. Available at: http://www.energy.ca.gov/sitingcases/eastaltamont/documents/2002-10-11_FSA_ERRATA.PDF

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California Energy Commission. August 8, 2003. Notice of Commission Hearing Supplemental Errata on the Revised PMPD. Available at: http://www.energy.ca.gov/sitingcases/eastaltamont/notices/2003-08-11_notice_SERPMPD.html

California Energy Commission. August 26, 2003. "East Altamont Energy Center Application for Certification: Final Commission Decision." P800-03-001. Available at: http://www.energy.ca.gov/sitingcases/eastaltamont/documents/2003-08-20_FINAL_DECISION.PDF

Western Area Power Administration (Western). March 2003. Errata to East Altamont Energy Center Environmental Assessment, Alameda County, CA, DOE/EA-1411. Available at: http://www.wapa.gov/interconn/pdf/EAECErrataFinal.pdf

Western. March 13, 2003. Draft Finding of No Significant Impact for the East Altamont Energy Center Project. Available at: http://www.wapa.gov/interconn/pdf/EAECDraftFONSI.pdf

Western. June 5, 2002. Response from the National Marine Fisheries Service (NMFS), SWR-01-SA-5669:JSS.

Western. July 29, 2002. US Fish and Wildlife Service (FWS) Biological Opinion. Letter 1-1-02-F-0092.

APPENDIX A

LEAD AGENCY JURISDICTION FOR MITIGATION

The California Energy Commission (CEC) is lead agency under the California Environmental Quality Act (CEQA). Pursuant to the CEC's Power Plant Site Certification Regulations (Title 20 of the California Code of Regulations), the CEC examines public health and safety, environmental impacts and engineering aspects of proposed power plants and all related facilities such as electric transmission lines, natural gas pipelines, etc.

The East Altamont Energy Center's (EAEC's) proposed interconnection with Western's substation triggered the need for compliance with the National Environmental Policy Act (NEPA) (42 U.S.C. §§4321-4327.). As the lead Federal agency under NEPA, Western cooperated with the CEC to jointly evaluate EAEC's environmental impacts. Western and the CEC will monitor the project throughout construction, operation and closure to require that the owners comply with all mitigation/Conditions of Certification. However, as part of the joint process, the jurisdictional responsibility for the topical areas addressed in the EA and Western's EA errata have been divided between CEC and Western as listed in Table A.1 below. The final FONSI describes Western's mitigation measures that are needed to mitigate potentially significant impacts to less than significant.

Table A.1 Jurisdictional Responsibility

Topic	Jurisdiction
Engineering Assessment	
Facility Design	The CEC reviewed the facility design. Conditions of Certification were identified to assure that it meets all LORS and that any significant environmental impacts uncovered during the facility design review are mitigated. Presiding members approved Conditions of Certification. Facility design is not addressed in Western's FONSI determination. However, Western has responsibility for the aspects of the facility design associated with the new electrical equipment that would be installed within the existing boundaries of the Tracy Substation and the new switchyard at the EAEC.
Power Plant Efficiency	The CEC assessed the design of the generating equipment and ancillary facilities to determine whether they would result in a significant adverse impact on energy resources through inefficient and unnecessary consumption of energy. No Conditions of Certification were proposed by CEC concerning this topic. Power Plant Efficiency is not addressed in Western's FONSI determination.

Topic	Jurisdiction
Power Plant Reliability	The CEC conducted a generating facility reliability analyses to determine if the power plant is likely to be built in accordance with typical industry norms for reliability of power generation. No Conditions of Certification were required for this topic. Power plant reliability is not addressed in Western's FONSI determination.
Transmission System Engineering	The Warren-Alquist Act required the CEC to prepare a written decision that addressed whether the proposed facility is to be designed, sited, and operated in a manner that protects environmental quality, assures public health and safety, and complies with applicable laws. The CEC identified Conditions of Certification pertinent to its geologic, and its civil, structural, mechanical, and electrical engineering aspects. The CPM will monitor implementation of the Conditions of Certification. Western, with input and review from Pacific Gas and Electric and other effected agencies, performed a System Impact/Facilities Study to analyze any potential reliability and congestion impacts that could occur when EAEC interconnects to the transmission grid. The Detailed Facilities Interconnection Study prepared by Western and approved by CEC identified no major transmission impacts resulting from the interconnection of EAEC to Western's transmission grid. Western anticipates that, upon completion of the EAEC and the installation of the transmission facilities and fiber optic cable, EAEC would transfer ownership of the new switchyard and one of the transmission lines to Western. Western will be responsible implementing the Conditions of Certification as they apply to its facilities.

Topic	Jurisdiction
Transmission Line Safety and Nuisance	The CEC evaluated potential negative impacts from transmission facilities. The Presiding members approved Conditions of Certification to reduce, or eliminate significant impacts. Western anticipates that, upon completion of the EAEC and the installation of the transmission facilities and fiber optic cable, EAEC would transfer ownership of the new switchyard and one of the transmission lines to Western. After turnover, Western will be responsible for implementing mitigation measures and Conditions of Certification for these facilities
Public Health and Safety	
Air Quality	The CEC Staff prepared an independent analysis to evaluate potential air quality impacts and the appropriateness of the proposed mitigation measures. The Presiding Members approved Conditions of Certification that must be monitored so that significant impacts are avoided. Western's FONSI requires that the measures in this plan be implemented to reduce local air quality impacts to less than significant.
Public Health	The CEC considered whether emissions will result in significant adverse public health impacts that violate standards for public health. The CEC determined that sufficient Conditions of Certification that control project emissions were specified in the Air Quality section.
Worker Safety/Fire Protection	The CEC assessed the completeness and adequacy of the measures proposed by the EAEC, LLC to comply with applicable worker health and safety requirements. The Presiding Members approved Conditions of Certification that will assure adequate worker safety and fire protection. Based on its EA, Western has concluded that the proposed EAEC provides adequate levels of safety if the Conditions of Certification are implemented.

Topic	Jurisdiction
Hazardous Materials	The CEC assessed whether the project provides safe handling and storage of hazardous materials. Presiding members approved Conditions of Certification to reduce any potential impacts to public health to a less than significant level. Based on its EA, Western has concluded that the management practices proposed for hazardous wastes were sufficient to avoid any significant adverse impacts.
Waste Management	The CEC and the EAEC, LLC provided assessments of the proposed waste management plans and mitigation measures designed to reduce the risks and environmental impacts associated with handling, storing, and disposing of project-related hazardous and non-hazardous wastes generated during facility construction and operation. The Presiding members approved Conditions of Certification that enable the project to operate in an environmentally safe manner. Based on its EA, Western has concluded that the disposal practices proposed for hazardous wastes were sufficient to avoid any significant adverse impacts.
Environmental Assessment	
Biological Resources	The CEC Staff assessed the potential direct and indirect effects on biological resources, including species of state concern for the California Department of Fish and Game, and recommended mitigation to reduce effects to biological resources. The Presiding Members approved Conditions of Certification that enable the project to avoid significant effects. Western has responsibility as the lead Federal agency under Section 7 of the Endangered Species Act. Western consulted with the U.S. Fish and Wildlife Service concerning mitigations that lessen or eliminate potential impacts on Federally listed threatened and endangered species. Western's FONSI determination includes the mitigations in this Plan that further protect the project from significant biological resource impacts.

Topic	Jurisdiction
Soil and Water Resources	The CEC assessed whether or not there would be impacts from power plant operation associated with water supplies, water quality, flood hazards and drainage and appropriateness of proposed mitigation. The CEC also assessed the potential direct and indirect effects of a project on the agricultural resources and required mitigation as appropriate. The Presiding members approved Conditions of Certification that reduce the project's potential impacts to less than significant. Western had responsibilities under Executive Orders 11988 and 11990 to consider the potential for adverse impacts the project may have on floodplains and wetlands. No wetlands are expected to be affected by the EAEC. However, if Western learns that upon final design of the EAEC's utility connections that a wetland(s) would be affected, Western will complete a wetland assessment per the DOE Floodplain/Wetland Review Requirements. Based on its EA, Western has concluded that the EAEC, as approved, would not cause any significant adverse direct, indirect, or cumulative impacts to soil and water resources.
Cultural Resources	The EAEC, LLC and CEC analyzed three aspects of impacts to cultural resources: prehistoric and historic archaeological resources and ethnographic resources. Presiding members approved Conditions of Certification that assure adequate mitigation of impacts to any cultural resources encountered during construction of the project site. Western has responsibilities under Section 106 of the National Historic Preservation Act (NHPA) concerning mitigations that may lessen or eliminate potential impacts on to cultural resources. Western required an ethnographic review to determine if any sites of Native American interest would be affected by the proposed EAEC. State Historic Preservation Officer (SHPO) under the provisions of the National Historic Preservation Act has concurred with Western's findings on historic resources.

Topic	Jurisdiction
Geological and Paleontological Resources	The CEC assessed the potential for the project to have adverse impact on geology and paleontologic resources Presiding members approved Conditions of Certification that reduce geological and paleontological impacts to less than significant. The geologic units in the area have been classified as highly sensitive for paleontological resources. Based on its EA, Western has concluded that the project's proposed mitigation measures would prevent any direct, indirect, or cumulative adverse significant impacts to geologic/paleontologic resources.
Local Impact Assessment	
Land Use	The CEC requires that energy facility projects will not result in significant land use impacts on a community or region. The Presiding members approved Conditions of Certification to assure the project is compatible with existing or planned land uses. Based on its EA, Western concluded that the proposed operation of the EAEC, with mitigation, would not cause any significant impacts to nearby land uses, nor would the EAEC contribute substantially to any significant cumulative land use impacts.
Noise and Vibration	The CEC evaluated whether noise produced by project-related activities will be consistent with applicable noise control laws and ordinances. The Presiding members approved Conditions of Certification to reduce noise impacts to workers and the community. Based on its EA and EA errata, Western has concluded that the proposed construction and operation of the EAEC would not cause any significant direct, indirect, or cumulative adverse noise impacts.
Traffic and Transportation	The CEC examined the extent to which the EAEC will affect the regional and local transportation systems near the project. Conditions of Certification approved by the Presiding members will mitigate temporary, short term congestion caused by project activities. Conditions are included in Western's EA for the delivery of hazardous materials to the EAEC site to mitigate any adverse impact to traffic and transportation.

Topic	Jurisdiction
Socioeconomics	The CEC assessed the socioeconomic impacts of the proposed EAEC project on local communities, community resources, public services, and minority and low-income populations. Presiding members approved Conditions of Certification to support local schools, recruit local employees, and procure materials and supplies within the local area. Based on its EA, Western concluded the EAEC would not have any significant adverse socioeconomic impacts on minority or low-income populations.
Visual Resources and Plumes	The EAEC, LLC and CEC provided assessments of the project's impact to the visual setting for adjacent and surrounding land uses. Presiding members concluded that construction and operation of the EAEC, as conditioned, will not cause any significant direct, indirect, or cumulative adverse visual impacts. Neither the EAEC's visual plumes nor its overall presence will further degrade the region's substantial existing energy infrastructure. As part of the EA and EA errata, Western reviewed visual impacts for impacts from the strong presence of the Tracy Substation and the many transmission lines radiating from it. Western did not find significant impacts because the proposed 230-kV line is short (0.5 mile) and located In an area where transmission structure is already a prominent feature of the landscape.

APPENDIX B

MITIGATION OF ENVIRONMENTAL IMPACTS BY ISSUE AREA

Pages numbers cited in this Appendix are page numbers in the "East Altamont Energy Center Application for Certification: Final Commission Decision" (Final Decision) approved August 20, 2003.

BIOLOGICAL RESOURCES

These conditions include the updates to the "Final Staff Assessment" (FSA) in the October 10, 2003 CEC Errata and Attachment B of the first post-hearing brief. The conditions include the FWS Biological Opinion (Letter 1-1-02-F-0092) submitted to Western on July 29, 2002.

IMPACT	CITATION	MITIGATION	SCHEDULE
Impacts to protected species, wildlife, and habitat	BIO-1,2,3 Pages 248-250	The project owner shall have a qualified biologist and biological monitors available on site meeting certain qualifications, performing certain tasks, and holding certain authorities.	The Designated Biologist's resume and qualifications must be submitted for review 60 days before site (or related facilities) mobilization. If the Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding Designated Biologist. Should emergency replacement of the designated specialist become necessary, the project owner shall immediately notify the CPM to discuss the qualifications of the proposed replacement specialist. Qualified Biological Monitors shall be approved by the CPM, and training shall be verified according to procedures in the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP). The Designated Biologist shall maintain written records of tasks and submit monthly and annual compliance summaries. The Designated Biologist or Biological Monitors shall have the authority to require the construction

IMPACT	CITATION	MITIGATION	SCHEDULE
			manager to halt all activities where there is potential for an adverse biological impact and notify the CPM of corrective actions. The Designated Biologist or Biological Monitors shall notify the CPM of noncompliance immediately, or no later than the following morning of any incident. Whenever corrective action is taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that corrective action is completed unless additional time is requested.
Impacts to protected species, wildlife, and habitat	BIO-4 Page 250	A Worker Environmental Awareness Program (WEAP) shall be developed and implemented for training all employees, contractors, and subcontractors.	The WEAP, supporting materials, and resume of the program administrator shall be made available 60 days prior to the start of site (or related facilities) mobilization activities; awareness training will be provided for all employees. The training may be a video. The number of people completing the training shall be reported monthly to the CPM. Signed training acknowledgement forms shall be kept on file during employment and for six months after termination of employment.
Impacts to protected species, wildlife, and habitat	BIO-5,11,12 Pages 251, 254, 255	BRMIMP is required. All mitigation measures and their implementation shall be included in the BRMIMP.	The Plan will be provided to the CPM 60 days prior to the start of site mobilization activities. If there are any permits that have not yet been received when the BRMIMP is first submitted, these permits shall be submitted to the CPM, CDFG, and FWS as addend to the BRMIMP within 10 days of their receipt.

IMPACT	CITATION	MITIGATION	SCHEDULE
			The CPM, in consultation with the CDFG, the FWS and any other appropriate agencies, will determine the BRMIMP's acceptability within 45 days of receipt. The CPM shall be notified not less than five days before implementing modifications to the approved Plan. Within 30 days after completion of project construction, the project owner shall provide a post-construction compliance report to the CPM identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which mitigation and monitoring items are still outstanding.
Impacts to protected species, wildlife, and habitat	BIO-6 Page 253	The project owner must prepare a Facility Closure Plan (for permanent or unexpected closure).	The Plan shall be made available at least 12 months prior to commencement of closure activities.
Impacts to fish and game	BIO-7, 8, 9, 10 Pages 253 and 254	The project owner must comply with permit requirements and agreements	Copies of the final CDFG Incidental Take Permit and/or a Consistency Determination, the CDFG Streambed Alteration Agreement, the FWS Biological Opinion on any amendment, and the ACOE 404 permit (or a letter stating it is not required) shall be provided within 30 days prior to the start of any site or related facilities mobilization activities.
Impacts to perching	BIO-11, 12 Page 254 to	The project owner shall implement designs for the transmission towers	All mitigation measures and implementation methods shall be included in the BRMIMP.

IMPACT	CITATION	MITIGATION	SCHEDULE
raptors	256	that prevent the electrocution of perching raptors.	
Impacts to habitat at the project site	BIO-13 Page 257 Endangered Species Consultation, July 29, 2002	The project owner must provide a conservation easement on the 151-acre Gomes Farm Parcel and compensate for any impacts to additional acres of habitat at a ratio of 3:1 for permanent impacts and 1:1 for temporary impacts. These preserved lands would be managed for the benefit of San Joaquin kit fox, California red-legged frog, and California tiger salamander.	At least 30 days prior to the start of site mobilization on the project site or any related facilities, the project owner shall provide the CPM with the conservation easement agreement, copies of the title transfer records, the name of the management entity, and written verification that the appropriate endowment fund (determined by the Property Assessment Report [PAR] analysis) has been received by the approved management entity. At least 30 days prior to incurring planned impacts and within 30 days of incurring unplanned impacts, the Designated Biologist shall prepare, as part of the monthly compliance report, a detailed description and evaluation of any additional habitat impacts. Within 30 days of the completion of construction, the project owner shall submit a final report on all additional acres impacted. Within 30 days of its recordation, the project owner shall provide FWS with a true copy of the recorded conservation easement. Activities that are inconsistent with the maintenance of the preserve for the listed species shall be prohibited on the conservation easement. The project owner shall establish an endowment to generate revenue for maintenance of the conservation easement. The fund shall be managed by a third party. FWS shall have reasonable access to Gomes farm with 24-

IMPACT	CITATION	MITIGATION	SCHEDULE
			hour notice. The project owner shall notify FWS when the project is completed and provide the number of California red-legged frogs and San Joaquin kit foxes injured, killed, or relocated from the construction area to Gomes farm (and a brief summary of their condition). Note: This is a term and condition from Western's BO.
Impacts to habitat for dispersal, cover, foraging, and denning activities of the San Joaquin kit fox	BIO-14 Page 258 VIS-3 Pages 416 and 417 FWS, Endangered Species Consultation, July 29, 2002	The project owner must implement an approved Landscaping Plan, implement a San Joaquin kit fox den installation and monitoring plan, and install artificial refuge dens for the San Joaquin kit fox underneath the landscaping and around the perimeter of the project.	At least 60 days prior to the start of any site or related facility mobilization activities, the details of this installation and monitoring plan shall be developed in consultation with the FWS, CDFG, and Western and shall be included in the BRMIMP. The project owner shall submit the Landscaping Plan prior to first turbine roll and at least 90 days prior to installing the landscaping. The planting must be completed by start of project operation. The project owner shall notify the CPM within seven days after completing landscaping, that the landscaping is ready for inspection. Note: This is a term and condition from Western's BO.
Impacts to wetlands from linears	BIO-15 Page 259	If it is determined that linear facilities would affect a wetland, the project owner shall prepare a Wetland Assessment prior to initiation of construction of the project linear facilities that shall be included within the BRMIMP.	Within 45 days prior to mobilization activities related to linear projects, the Plan shall be submitted for review and the provisions implemented or a letter shall be obtained from Western stating the Wetland Assessment is not necessary.
Impacts to California	FWS, Endangered	The proposed action shall be designed and constructed in ways	California red-legged frog breeding habitat shall be avoided if feasible. If suitable breeding habitat

IMPACT	CITATION	MITIGATION	SCHEDULE
red-legged frog and San Joaquin kit fox	Species Consultation, July 29, 2002	that will minimize both direct and indirect effects on California red-legged frog and San Joaquin kit fox	cannot be avoided, measures shall be implemented to temporarily relocate frogs or other measures taken as required by the FWS. Any person capturing or handling a California red-legged frog must be a qualified biologist approved by the FWS. Pre-design surveys shall be conducted to identify and avoid any San Joaquin kit fox burrows or dens. All surveys, deconstructions, and monitoring must be conducted by a qualified biologist approved by the FWS. Nighttime construction shall be minimized. Speed limits shall be set and enforced in the construction area at 20 miles per hour or less. Off-road traffic shall be prohibited. San Joaquin kit fox exclusion zones shall be implemented. Pipes over four inches in diameter shall be capped or checked for San Joaquin kit fox before they are moved. All excavated, steep-walled holes or trenches more than two feet deep shall be covered with plywood or similar materials at the close of each workday, or all excavated, steep-walled holes or trenches more than two feet deep shall be provided with one or more escape ramps constructed of earthen fill or wooden planks. All food-related trash items shall be placed in closed containers and removed from the project area at least once a week. Firearms will be prohibited on the project site. Pets will be prohibited on the project site. Use of rodenticides and herbicides will

IMPACT	CITATION	MITIGATION	SCHEDULE
			be prohibited in the project area. An employee education program shall be conducted. A representative shall be identified during the program to be the contact for any employee or contractor who might inadvertently kill or injure a California red-legged frog or San Joaquin kit fox or who finds any dead, injured, or trapped animal. Any contractor, employee, or agency personnel who kills or injures a California red-legged frog or San Joaquin kit fox shall be required to immediately report the incident to the contact, who would report it to FWS within one working day. All areas subject to temporary ground disturbance shall be re-contoured and revegetated upon completion of the project to promote restoration of the area to pre-project conditions. An escape ramp or structure shall be installed immediately to allow trapped animals to escape or contact FWS for advice. The landscaping plant species used must not have multiple trunks or limbs that could support raptor perching or nesting because raptors could prey upon San Joaquin kit fox. Plastic monofilament erosion control matting shall not be used where California red-legged frogs may become entangled or trapped in it. A gap approximately 1,500 feet long shall be left in the landscaping along Byron Bethany Road

IMPACT	CITATION	MITIGATION	SCHEDULE
			northeast of the project site and along Kelso Road southeast of the project site to maintain visual and physical access for the San Joaquin kit fox. The open cut trench crossing of Mountain House Creek shall only occur when the creek channel is dry. Note: These are terms and conditions from Western's BO.

CULTURAL RESOURCES

Note: These conditions were updated in the October 10, 2003 CEC Errata and included in the Final Decision.

IMPACT	CITATION	MITIGATION	SCHEDULE
Protection of cultural resources	CUL-1 Pages 335 and 336	The project owner is required to have a qualified cultural resources specialist (CRS) or cultural resources monitors (CRMs) as needed for the project.	Resumes for the CRS and alternate CRS and their qualifications she be submitted 60 days before the start of ground disturbance. Resumes for additional alternates may be submitted at least ten days prior to accepting responsibilities. In the event an additional alternate is selected, the project owner shall notify the CPM within 24 hours by telephone or e-mail. If the existing CRS is terminated or released, the resume of the proposed new CRS shall be submitted within ten days. A letter naming anticipated CRMs and stating their qualifications should be submitted 20 days prior to ground disturbance. If new CRMs are hired during the project, additional letters are required one week beginning onsite duties. A letter stating that the CRS is available for onsite work and is prepared to implement the cultural resources conditions of certification shall be submitted at least 10 days before the start of ground disturbance.
Protection of cultural resources	A.1 CUL-2 Page 337	The project owner must provide the CRS and the CPM with the necessary maps, drawings, and construction schedule.	The CRS and CPM shall receive the maps, drawings, and construction schedule at least 45 days before ground disturbance, and copies of information for new phases (if not previously submitted) shall be provided 30 days prior to

IMPACT	CITATION	MITIGATION	SCHEDULE
			disturbance. A letter shall be submitted to the CPM within five days of identifying changes to the construction schedule. The CRS shall consult weekly with the project manager to confirm areas to be worked during the next week and to receive a current schedule.
Protection of cultural resources	CUL-3 Page 337-338	A Cultural Resources Monitoring and Mitigation Plan (CRMMP) is required. In the event cultural resources are discovered, a Cultural Resource Report (CRR) will be recorded on the Department of Parks and Recreation form, DPR 523.	A CRMMP shall be submitted by the CRS to the CMP at least 30 days prior to the start of ground disturbance.
Protection of cultural resources	CUL-4 Page 339	A Worker Environmental Awareness Program (WEAP) will be developed and training will be conducted for all new employees.	The Monthly Compliance Report will include the WEAP Certification of Completion forms for persons trained in the prior month and the total persons trained to date.
Protection of cultural resources	CUL-5 Page 339-340	Work will be halted or redirected if previously unknown cultural resource sites or materials are found or if known resources may be impacted in an unanticipated manner.	The CRS and the project owner shall notify the CPM within 24 hours of a cultural resources find by telephone or email. The project owner must provide the CPM with a letter at least 30 days before ground disturbance confirming that the CRS, the alternate CRS, and the CRMs can halt work in the vicinity of a cultural resource find.
Protection of cultural	CUL-6 Pages 340	Cultural resource monitoring shall be conducted and documented during	The CRS and the project owner shall notify the CPM of noncompliance by telephone or email within

IMPACT	CITATION	MITIGATION	SCHEDULE
resources	to 342 6	initial ground disturbance at the project site and all linear components, and the need for subsequent monitoring will be determined.	24 hours and provide a written report no sooner than two weeks after the issue is resolved. A daily log shall be maintained. Weekly summary reports shall be prepared and included in the Monthly Compliance Report. One week before ground disturbance in areas where artifacts may be uncovered, the project owner shall notify the CPM regarding the identity of the person(s) retained to conduct Native American monitoring. At least 30 days prior to ground disturbance, an ethnography study will be conducted on behalf of Native Americans at Santa Rosa Rancheria. No later than 90 days after the start of ground disturbance, a copy of the ethnography study scope of work and a summary of achieved objectives shall be submitted to CPM and Western for review and approval. No later than nine months after ground disturbance, a copy of the completed ethnography shall be submitted to the CPM and Western for review and approval. Note: Ethnography study completed and provided to Western.
Protection of cultural resources	CUL-7 Pages 340-342	CRS will prepare the research design and scope of work for cultural resource recovery	After the determination of significance is made, the CRS shall prepare the research design and scope of work and submit it to Western and the CPM for

IMPACT	CITATION	MITIGATION	SCHEDULE
			review and approval within 14 days of any discovery of significant cultural resources and prior to beginning data recovery or additional mitigation. Western shall submit the research design and scope of work to SHPO.
Protection of cultural resources	CUL-8 Pages 342 and 344	The CRS shall prepare a CRR on any cultural resources discovery. A final CRR will be prepared according to the Archaeological Resource Management Report (ARMR) Guidelines for all cultural resources activity conducted for the project.	The CRR will be prepared within 90 days of completion of the analysis of the recovered cultural materials and submitted to Western and the CPM for review and approval within seven days after completion of the report. Western will submit the report to SHPO. A final CRR will be prepared within 90 days of conclusion of ground disturbance.
Protection of cultural resources	CUL-9 Pages 344 and 345	Cultural materials collected as a result of project activity shall be curated.	The CRS shall provide Western and the CPM with a copy of the curation agreement at least ten days prior to the initiation of construction activities. If there are procedural restrictions on such an issuance, the specialist shall provide a copy of an agreement no more than 30 days following the discovery of cultural materials. The CRS shall provide an inventory to Western and the CPM of all cultural materials curated at the facility and signed documentation that they have been accepted for curation. Compliance files shall be maintained for the life of the project.

WATER RESOURCES

Under Section 7 regulations (50 CFR 402) of the Endangered Species Act (6 USC Section 1536(a)(2)), National Marine Fisheries Services (NMFS) concurs with FWS and Western's determination that the proposed project will not adversely affect federally listed Central Valley steelhead (Oncorhynchus mykiss), Central Valley spring-run Chinook salmon (O. tshawytscha) or Sacramento River winter-run Chinook salmon (O. tshawytscha) or their critical habitat. If, however, the proponents of EAEC decide to eliminate the possibility of using reclaimed water for their cooling purposes, this may justify a new consultation due to the changes from the original project description. The NMFS requires that, if a significant change in the project description occurs, reconsideration of Section 7 consultation would be warranted based on the "new" project description. It should be noted, however, that if the primary reasons for concurring with the original Western determination would still be relevant, they would likely result in the same decision by NMFS (Letter dated June 5, 2002).

The Final Decision includes condition of certification SOILS&WATER 5, which states that prior to plant operation, a pipeline capable of conveying 5,900 gallons per minute of recycled water from MHCSD's treatment facilities to EAEC shall be built to require the use of recycled water. While this condition is outside the scope of Western's jurisdiction, use of recycled water assures minimal impact to the California Delta fish species.

APPENDIX C

MITIGATION OF IMPACTS FROM ENGINEERING ASSESSMENTS BY ISSUE AREA

FACILITY DESIGN

IMPACT	CITATION	MITIGATION	SCHEDULE
Impacts from electrical construction	ELEC-1 Page 81	Approvals for electrical construction	The proposed final design, specifications and calculations must be submitted for Chief Building Official (CBO) design review and approval at least 30 days prior to the start of each increment of electrical construction for electrical equipment and systems 480 volts and higher The project shall request that the CBO inspect the installation for compliance with the requirements of applicable laws, ordinances, regulations, and standards (LORS)

TRANSMISSION SYSTEM ENGINEERING

IMPACT	CITATION	MITIGATION	SCHEDULE
Transmission facilities conformance to all applicable LORS	TSE-1 Page 91	The project owner design, construct, and operate the proposed transmission facilities in compliance with all applicable LORS.	At least 60 days prior to the start of grading of the power plant switchyard or transmission facilities, the project owner shall submit to the CPM for approval: - Electrical one-line diagrams, signed and sealed by a registered professional electrical engineer - The Detailed Facilities Study (if modified), including a description of facility upgrades, operational mitigation measures, and/or remedial action schemes (RAS) or special protection systems (SPS) - The Interconnection Agreement (if not provided

IMPACT	CITATION	MITIGATION	SCHEDULE
			previously) - A signed letter from the project owner stating that the mitigation measures are acceptable. Substitution of equipment and substation configurations shall be identified and submitted for approval
Transmission facilities conformance to all applicable LORS	TSE-2 Page 92	The project owner must obtain approval for changes that may not conform to the requirements of TSE-1.	At least 60 days prior to the construction of the power plant switchyard and transmission facilities, the project owner shall inform the CPM of any impending changes that may not conform to requirements 1-8 of TSE-1 and request approval to implement such changes.
Transmission facilities conformance to all applicable LORS	TSE-3 Pages 92 to 93	The project owner must inspect transmission facilities during project construction and any subsequent CPM-approved changes for compliance with LORS.	In case of nonconformance, the project owner shall inform the CPM in writing within ten days of discovering such nonconformance and describe the corrective actions to be taken. Within 60 days after first synchronization of the project to the grid, the EAEC, LLC shall transmit to the CPM an engineering description(s) and one-line diagrams of the "as built" facilities, signed and sealed by the registered electrical engineer or other acceptable verification, and a statement attesting to conformance with LORS.

TRANSMISSION LINE SAFETY AND NUISANCE

IMPACT	CITATION	MITIGATION	SCHEDULE
Transmission line safety and minimize potential for nuisance	TLSN-1 Page 97	The project shall be constructed for the proposed interconnection transmission lines according to the requirements of CPUC's GO-95, GO-52 Title 8, Section 2700 et	Thirty days before starting construction of the EAEC's transmission line or related structures and facilities, the project owner shall submit a letter signed by a California registered electrical engineer affirming that the overhead section will be constructed according to

IMPACT	CITATION	MITIGATION	SCHEDULE
shocks		seq. of the California Code of Regulations and Western electric and magnetic field (EMF) reduction guidelines.	the requirements.
Transmission line safety and minimize potential for nuisance shocks	TLSN-2 Page 97	All metallic objects along the route of the overhead section must be grounded according to industry standards.	At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition.
Transmission line safety and minimize potential for nuisance shocks	TLSN-3 Page 97	Reasonable steps must be taken to resolve any complaints of interference with radio or television signals from operation of the proposed lines.	The project owner shall investigate all line-related complaints, which shall be summarized, along with related mitigation measures for the first five years, and provided in an annual report to the CPM.
Transmission line safety and minimize potential for nuisance shocks	TLSN-4 Page 97	The project owner shall engage a qualified consultant to measure the strengths of the electric and magnetic fields from the proposed lines before and after they are energized.	All measurements, reports, and mitigation shall be completed prior to turnover of equipment to Western and shall be completed with Western's approval. The project owner shall file copies of the pre- and post-energization measurements with the CPM within 60 days after completion of the measurements. CEC will assess the need for further mitigation from the results of such measurements.