

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5112



**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

DOCKET	
97-AFC-2C	
DATE	_____
RECD.	Dec 27 2011

In the Matter of:) **Docket No. 97-AFC-2C**
SUTTER ENERGY CENTER)
))
)) **Order No.**
))
Calpine Corporation) **ORDER APPROVING a Petition**
) **to Modify the Sutter Energy Center**
) **to install the Grimes Natural Gas Pipeline**
))

On March 7, 2011, Calpine Corporation (Calpine), the owner of the Sutter Energy Center Project, submitted a petition requesting to service the power plant with a 2.8-mile, 6-inch natural gas pipeline referred to as the Grimes Pipeline. The modification will allow the Project Owner to use natural gas from the Grimes natural gas field in the Sacramento Basin north and west of the project site. The Sutter Energy Center currently receives gas from Pacific Gas & Electric (PG&E) natural gas transmission system via the 20-inch Sutter Pipeline.

STAFF RECOMMENDATION

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of Calpine’s petition to modify the Sutter Energy Center Project and amend related Conditions of Certification.

ENERGY COMMISSION FINDINGS

Based on staff’s analysis, the Energy Commission concludes that the proposed changes will not result in any significant impacts to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Section 1769(a) concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission’s Final Decision pursuant to Section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- The Change will be beneficial to Calpine Corporation by allowing the project to use natural gas from the Grimes natural gas field in the Sacramento Basin north and west of the project site. The Sutter Energy Center currently receives gas from the Pacific Gas & Electric (PG&E) natural gas transmission system via the 20-inch Sutter Pipeline; and,

- The change is based on information that was not available to the parties prior to Commission certification because at the time of the license PG&E was the only supplier of natural gas that could provide the quantity of natural gas needed for the project. Now Venoco Inc. is offering an alternative to PG&E's natural gas supply and the new pipeline will allow the project to directly access the local natural gas supply from Venoco Inc.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Commission Decision for the Sutter Energy Center Project. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikeout~~.

CONDITIONS OF CERTIFICATION

AQ-SC1 Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with conditions AQ-SC3, AQ-SC4 and AQ-SC5 for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM delegates. The AQCMM and AQCMM delegates shall have full access to all areas of construction on the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by applicable construction mitigation conditions. The AQCMM and AQCMM delegates may have other responsibilities in addition to those described in this condition. The AQCMM shall not be terminated without written consent of the compliance project manager (CPM).

Verification: At least 15 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM delegates. The AQCMM and all delegates must be approved by the CPM before the start of ground disturbance.

AQ-SC2 Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide, for approval, an AQCMP that details the steps to be taken and the reporting requirements necessary to ensure compliance with conditions of certification AQ-SC3, AQ-SC4 and AQ-SC5.

Verification: At least 15 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The CPM will notify the project owner of any necessary modifications to the plan within 7 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

AQ-SC3 Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each monthly compliance report (MCR) that demonstrates compliance with the following mitigation measures for purposes of preventing all fugitive dust plumes from leaving the

project site and linear facility routes. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A. **All unpaved roads and disturbed areas used for this project and linear construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives of AQ-SC4. The frequency of watering may be either reduced or eliminated during periods of precipitation.**
- B. **No vehicle traveling on unpaved roads shall exceed a speed of 15 miles per hour.**
- C. **Any construction site entrances shall be posted with visible speed limit signs.**
- D. **All construction equipment vehicle tires shall be inspected and washed as necessary to be free of dirt prior to entering paved roadways.**
- E. **Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.**
- F. **All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.**
- G. **All construction vehicles shall enter the construction site through the treated entrance roadways unless an alternative route has been submitted to and approved by the CPM.**
- H. **Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent run-off to roadways.**
- I. **All paved roads used for construction shall be swept as needed on days when construction activity occurs to prevent the accumulation of dirt and debris.**
- J. **All public roadways exiting the construction site shall be swept as needed on days when construction activity occurs or on any other day when dirt or run-off from the construction site is visible on the public roadways.**
- K. **All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or treated with appropriate dust suppressant compounds.**
- L. **All vehicles that are used to transport solid bulk material on public roadways and that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks to provide at least two feet of freeboard.**

- M. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

Verification: The project owner shall include in the MCR: (1) a summary of all actions taken to maintain compliance with this condition; (2) copies of any complaints filed with the air district in relation to project construction; and (3) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion, as approved by the CPM.

AQ-SC4 Dust Plume Response Requirement: The AQCMM or an AQCMM delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes with the potential to be transported off the project site, 200 feet beyond the centerline of the construction of linear facilities, or within 100 feet upwind of any regularly occupied structures not owned by the project owner indicate that existing mitigation measures are not providing effective mitigation. The AQCMM or delegate shall then implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed.

Step 1: Within 15 minutes of making such a determination, the AQCMM or delegate shall direct more intensive application of the existing mitigation methods.

Step 2: If Step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination, the AQCMM or delegate shall direct implementation of additional methods of dust suppression.

Step 3: If Step 2 specified above fails to result in effective mitigation within one hour of the original determination, the AQCMM or delegate shall direct a temporary shutdown of the activity causing the emissions. The activity shall not restart until the AQCMM or delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The project owner may appeal to the CPM any directive from the AQCMM or delegate to shut down an activity, provided that the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

Verification: The AQCMP shall include a section detailing how additional mitigation measures will be accomplished within the specified time limits.

AQ-SC5 Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the MCR, a construction mitigation report that demonstrates compliance with the following mitigation measures for purposes of controlling

diesel construction-related emissions. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags, issued by the on-site AQCMM, showing that the engine meets the conditions set forth herein.**
- B. All construction diesel engines with a rating of 50 hp or higher shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, § 2423(b)(1), unless certified by the on-site AQCMM that such engine is not available for a particular item of equipment. This good faith effort shall be documented with signed written correspondence by the appropriate construction contractors, along with documented correspondence with at least two construction equipment rental firms. In the event that a Tier 3 engine is not available for any off-road equipment larger than 50 hp, that equipment shall be equipped with a Tier 2 engine or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 2 levels, unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is “not practical” for the following, as well as other, reasons:**
 - 1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and either a Tier 1 engine or the highest level of available control is being used; or**
 - 2. The construction equipment is intended to be on site for five days or less.**
 - 3. The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not possible.**
 - 4. Equipment owned by specialty subcontractors may be granted an exemption, for single equipment items on a case-by-case basis, if it can be demonstrated that extreme financial hardship would occur if the specialty subcontractor had to rent replacement equipment, or if it can be demonstrated that a specialized equipment item is not available by rental.**
- C. The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and the AQCMM demonstrates that one of the following conditions exists:**

1. The use of the control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.
 2. The control device is causing or is reasonably expected to cause significant engine damage.
 3. The control device is causing or is reasonably expected to cause a significant risk to workers or the public.
 4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
- D. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.
- E. All diesel heavy construction equipment shall not idle for more than five minutes, to the extent practical.
- F. Construction equipment will employ electric motors when feasible.

Verification: The project owner shall include in the MCR: (1) a summary of all actions taken to maintain compliance with this condition; (2) a list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that the equipment has been properly maintained; and (3) any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion, as approved by the CPM.

BIO-2 Designated Biologist Duties

The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist(s), with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with CDFG and USFWS. The Designated Biologist shall remain the contact for the project owner and the CPM.

The CPM-approved Designated Bbiologist shall perform the following duties:

- 1) advise the project owner's supervising construction or operations engineer on the implementation of the biological resource Conditions of Certification;

- 2) supervise or conduct mitigation, monitoring, and other biological resource compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species;
- 3) direct access and construction activities that occur within 200 feet of giant garter snake habitat. The Designated Biologist shall conduct WEAP training (BIO-4), preconstruction surveys for giant garter snake (BIO-8), survey open excavations and trenches every morning prior to start of work, and be present during all work with special attention to excavations, spoil placement, backfilling, and silt fence/snake fence installation and removal; and
- 4) notify the project owner and the CPM of any non-compliance with any Condition.

Verification: No fewer than 30 days prior to construction-related ground disturbance, the project owner shall submit the names of the Designated Biologist(s) and submit it to the CPM and USFWS for review and final approval. No construction-related ground disturbance, grading, boring, or trenching shall commence until an approved Designated Biologist is available to be on site. If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist. The Designated Biologist shall maintain written records of the tasks described above, and summaries of these records shall be submitted along with the Monthly Compliance Reports to the CPM.

BIO- 2a Biological Monitor Selection and Duties

The Designated Biologist shall submit the resume, at least three references, and contact information of the proposed Biological Monitor(s) to the CPM. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks. Biological Monitor(s) training by the Designated Biologist shall include familiarity with the conditions of certification, BRMIMP, and WEAP. The Biological Monitors shall assist the Designated Biologist in conducting surveys and in monitoring of site mobilization activities, construction-related ground disturbance, fencing, grading, boring, trenching and reporting.

Verification: The project owner shall submit the specified information to the CPM for approval of Biological Monitors at least 30 days prior to the start of any site mobilization or construction-related ground disturbance, grading, boring and trenching. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) has been trained including the date when training was completed. If additional Biological Monitors are needed during construction the specified information shall be submitted to the CPM and for approval at least 10 days prior to their first day of monitoring activities. The Biological Monitor shall submit in the Monthly Compliance Report to the CPM

copies of all written reports and summaries that document biological resources compliance activities.

BIO-4 Worker Environmental Awareness Program

The project owner shall develop and implement a Worker Environmental Awareness Program (**WEAP**) in which each of its own employees, **monitors, inspectors,** ~~as well as employees of contractors and subcontractors who work on the project site or related facilities (including any access roads, storage areas, transmission lines, water and gas lines)~~ during construction and operation, **shall be required to take the WEAP training to become** are informed about biological resource sensitivities associated with the project. ~~(see General Conditions of Compliance).~~

The Worker Environmental Awareness Program:

- 1) shall be developed by the **Designated Biologist** and consist of an on-site or classroom presentation in which supporting written material is made available to all participants;
- 2) must discuss the locations and types of sensitive biological resources on the project site and adjacent areas **specifically training workers to recognize giant garter snakes, their habitat(s), nature and purpose of protection measures, the need to report all sightings of giant garter snakes, consequences of not complying with permit conditions and measures, and the terms and conditions of any permit applicable to the project. The Designated Biologist must identify giant garter snake habitat areas and indicate to all site personnel that they are Environmentally Sensitive Areas in the WEAP training;**
- 3) must present the reasons for protecting these resources;
- 4) must present the meaning of various temporary and permanent habitat protection measures; and
- 5) must identify who to contact if there are further comments and questions about the material discussed in the program.

The specific program ~~can~~ **shall** ~~can~~ be administered **by the Designated Biologist** a competent individual(s) ~~acceptable to the designated biologist.~~

Each participant in the on-site Worker Environmental Awareness Program shall sign a statement declaring that the individual understands and shall abide by the guidelines set forth in the program material. Each statement shall also be signed by the person administering the Worker Environmental Awareness Program.

The signed statements for the construction phase shall be kept on file by the project owner and made available for examination by the CPM for a period of at least six (6) months after the start of commercial operation. Signed statements for active operational personnel shall be kept on file by the project owner for the duration of their employment and for six months after their termination.

Verification: At least 30 days prior to the start of **any ground-disturbing activities** rough grading, the project owner shall provide copies of the **draft** Worker Environmental Awareness Program and all supporting written materials prepared by the **Designated Biologist to the CPM for review and comment**, and the name and qualifications of the person(s) administering the program to the CPM for approval. **Within 10 days prior to the start of any ground-disturbing activities, a final approved WEAP with agency comments addressed shall be submitted to the CPM.**

The project owner shall state in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date.

BIO-5 CESA Memorandum of Understanding

~~Prior to the start of any ground disturbance activities, the project owner shall enter into an Endangered Species Memorandum of Understanding (MOU) with the California Department of Fish and Game (CDFG) (per Section 2081 of the California Endangered Species Act) and implement the terms of the agreement.~~

~~**Verification:** At least 60 days prior to the start of rough grading, the project owner shall submit to the CPM a copy of the final CDFG Endangered Species MOU.~~

BIO-7 Streambed Alteration Agreement and Biological Opinion Permit Conditions

~~The project owner shall acquire either a Streambed Alteration Agreement or written verification that this permit is not necessary from the California Department of Fish and Game for project impacts to drainages, and implement the terms of the agreement. **implement the terms and conditions outlined in CDFG's Final Lake or Streambed Alteration Agreement (SAA, CDFG 2011) and the USFWS's Biological Opinion (BO, USFWS 2011), both which have been issued for the Sutter Grimes pipeline project. Giant garter snake-specific impact avoidance measures that are included in the final SAA and BO are covered separately in BIO-8 (GGIS Impact Avoidance and Minimization Measures).**~~

AVOIDANCE AND MINIMIZATION MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

To avoid or minimize adverse impacts to fish and wildlife resources identified above, the project owner shall implement each measure listed below.

- 1. WORK PERIOD. The time period for completing the work within the stream zone shall be restricted to periods of low stream flow and dry weather and shall be confined to the period of May 1 to October 1. Construction activities shall be timed with awareness of precipitation forecasts and likely increases in stream flow. Construction activities within the stream zone shall cease until all reasonable erosion control measures, inside and outside of the stream zone, have been**

implemented prior to all storm events. Revegetation, restoration and erosion control work is not confined to this time period.

2. WORK PERIOD EXTENSIONS. At the CPM's discretion based on consultation with the CDFG, the work period may be extended based on the extent of the work remaining, on site conditions and reasonably anticipated future conditions. If the project owner finds more time is needed to complete the authorized activity, the project owner shall submit a written request for a work period time extension to the CPM with a copy to CDFG. The work period extension request shall provide the following information: 1) Describe the extent of work already completed; 2) Provide specific detail of the activities that remain to be completed within the stream zone; and 3) Detail the actual time required to complete each of the remaining activities within the stream zone. The work period extension request should consider the effects of increased stream conditions, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Photographs of the work completed and the proposed work areas are helpful in assisting CDFG in its evaluation. Time extensions are issued at the discretion of the CPM based on consultation with CDFG. The CPM upon consultation with CDFG, reserves the right to require additional measures designed to protect natural resources.
3. NO EQUIPMENT SHALL WORK IN THE WATER.
4. ESCAPE RAMP IN EXCAVATION PITS. At the end of each work day, an escape ramp shall be placed at each end of the open excavation to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees.
5. BIOLOGICAL MONITOR. The project owner shall provide a Designated Biologist or Biological Monitor with qualifications, roles, and responsibilities specified in BIO-1, BIO-2, BIO-2a, and BIO-3.
6. ENVIRONMENTAL AWARENESS TRAINING. All construction personnel shall receive WEAP training as specified in BIO-4.
7. COVER OPEN PIPES. Open ends of pipes, conduits and similar materials shall be covered to exclude wildlife. Such materials shall be checked for signs of wildlife prior to disturbance.
8. GARBAGE STORAGE AND REMOVAL. Food wrappers and construction-related garbage shall be contained in covered garbage cans and removed from the site.

- 9. NO PETS, FIREARMS OR CAMPFIRES. Workers will not be allowed to bring pets or firearms to the project area nor light campfires within the project area.**
- 10. HEAVY EQUIPMENT CONFINED TO EXISTING ROADS. Construction activities that occur within suitable giant garter snake upland habitat will be minimized. When possible, movement of heavy equipment shall be confined to existing roadways to minimize disturbance.**
- 11. RESTORATION OF WORK SITE/EXCAVATED SOIL REMOVAL OR DISTRIBUTION. After completion of construction activities, temporary fill and construction debris shall be removed and disturbed areas shall be restored to pre-project conditions, see BIO-8 #15. Excavated soil shall either be removed from work site or backfilled into excavations. With approval from the CPM, some excess excavated soil may be distributed over the existing work area.**
- 12. COVER SPOIL PILES. The project owner's contractor shall have readily available plastic sheeting or visquine and will cover exposed spoil piles and exposed areas to prevent these areas from losing loose soil into the stream. These covering materials shall be applied when it is evident rainy conditions threaten to erode loose soils into the stream.**
- 13. EQUIPMENT OVER DRIP PANS. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake shall be positioned over drip pans.**
- 14. CHECK VEHICLES/EQUIPMENT DAILY. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat.**
- 15. CONTROL DRILLING MUD. At no time shall drill cuttings, drilling mud, and/or materials or water contaminated with bentonite or any other substance deemed deleterious to fish or wildlife be allowed to enter the stream or be placed where they may be washed into the stream. Any contaminated water/materials from the drilling and/or project activities shall be pumped or placed into a holding facility and removed for proper disposal.**
- 16. VEGETATION REMOVAL. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. No native trees shall be removed or damaged without prior consultation and approval of the CPM and a CDFG representative. Using hand tools (clippers, chain saw, etc.), trees may be trimmed to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the riparian/stream zone.**

17. SEDIMENT CONTROL. Precautions to minimize turbidity/siltation shall be taken into account during project planning and implementation. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season . Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes. Products with plastic monofilament or jute netting (such as found in straw wattles/fiber rolls and some erosion control blankets) shall not be allowed. Wildlife-friendly erosion control and sediment control products that will not entangle snakes and other wildlife shall be used instead. Special provisions shall be included in the bid solicitation package that prohibit the use of monofilament or jute netting. If this is not possible, the contractors, subcontractors and anyone performing erosion or sediment control work on this project, shall be specifically instructed that these products are not allowed on the work site. The project owner is responsible for the removal of non-biodegradable silt barriers after the disturbed areas have been stabilized with erosion control vegetation (usually after the first growing season). Upon the CPM's determination that turbidity/siltation levels resulting from project-related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CPM-approved (based on consultation with CDFG) control devices are installed or abatement procedures are initiated.

18. POLLUTION CONTROL. Utilize Best Management Practices to prevent spills and leaks into water bodies. If maintenance or refueling of vehicles or equipment must occur on-site, use a designated area and/or a secondary containment, located away from drainage courses to prevent the runoff of storm water and the runoff of spills. Ensure that all vehicles and equipment are in good working order (no leaks). Place drip pans or absorbent materials under vehicles and equipment when not in use. Ensure that all construction areas have proper spill cleanup materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. Any substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake by the project owner or any party working under contract or with the permission of the project owner, shall be removed immediately. The CPM and

CDFG shall be notified immediately by the project owner of any spills and shall be consulted regarding clean-up procedures.

Verification: ~~At least 45 days prior to the start of rough grading, the project owner shall provide the CPM with a copy of the California Department of Fish and Game Streambed Alteration Agreement or written verification that this permit is not necessary for this project.~~

The project owner shall notify the CPM in writing at least two working days before beginning work and at least one working day before ending work. The project owner shall also notify CDFG at the contact info below; however, email notification to CDFG is preferred:

Department of Fish and Game
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Attn: Lake and Streambed Alteration Program -Sandra Jacks
Notification #1600-2011-0011 R2
Fax: 916-358-2912
sjacks@dfg.ca.gov

Upon completion of the project activities, the project owner shall digitally photograph the work area within the stream zone and document photos in the final Monthly Compliance Report and submit to the CPM. A copy of the final Monthly Compliance Report with final site work photographs shall also be submitted to CDFG at the address above.

The project owner shall notify the CPM and CDFG within two (2) business days in the event of any spills into state waters regarding clean-up procedures.

All mitigation measures and their implementation methods shall be included in the BRMIMP. All work activities that occur in the stream zone shall be described and summarized in each Monthly Compliance Report. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

BIO-7a Frac-out Plan

The project owner shall revise the draft *Grimes Pipeline Project Frac-out Contingency Plan* based on review and comments provided by the CPM in consultation with CDFG and re-submit to CPM for review and approval. Prior to the commencement of construction activities, the project owner shall submit to the CPM with copy to CDFG a final, approved Frac-out Plan with agency comments incorporated.

Verification: At least 30 calendar days prior to the start of any ground-disturbing activities, the project owner shall submit a revised Frac-out Plan to CDFG for review and comment and to the CPM for review and approval. The project owner shall also provide the CPM with a copy of the transmittal letter to CDFG requesting review and comment.

At least 10 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters from CDFG, along with any changes to the final Frac-out Plan, to the CPM for review and approval. All modifications to the final plan shall be made only after approval by the CPM, in consultation with CDFG.

BIO-8 Giant Garter Snake Impact Avoidance and Minimization Measures

The project owner shall ensure the following measures are implemented to avoid or mitigate project impacts to giant garter snakes **during construction in accordance with CDFG's Final Lake or Streambed Alteration Agreement (CDFG 2011), USFWS's Biological Opinion issued for the project (USFWS 2011), and USFWS's Guidelines for Restoration and/or Replacement of Giant Garter Snake Habitat (USFWS Appendix A):**

- 1) Avoid trenching or auguring activities within 200 feet of giant garter snake habitat from October 2 through April 30. **Avoided giant garter snake habitat shall be designated as Environmentally Sensitive Areas and will be flagged by the Designated Biologist or approved Biological Monitor as areas to be avoided by construction personnel and equipment.**
- 2) ~~Have the designated biologist on-site during construction activities that occur between October 1 and May 1. The designated biologist shall possess a permit as required under Section 10(a)1(A) of the federal Endangered Species Act to capture or relocate snakes.~~

An agency-approved Designated Biologist will be onsite during all construction activities within 200 feet of aquatic habitat for GGS. The Designated Biologist will ensure that all measures related to GGS are followed and have the authority to stop construction if they are not. Any open trenches will be inspected daily for trapped snakes.

- 3) ~~Within 24 hours prior to commencement of construction activities, the site shall be inspected for snakes by the designated biologist. Observed snakes should be reported and cleared to an area that will not be affected by construction within the next 24 hours. If a snake is encountered during construction activities, the designated biologist should be contacted and take appropriate measures to ensure the snake will not be harmed.~~

Preconstruction Surveys for GGS. No more than 24 hours prior to construction activities, the Designated Biologist shall survey the work areas within potential giant garter snake habitat for giant garter snakes. Surveys of work areas shall be repeated if a lapse in construction activity of 48 hours or greater has occurred. The results of this

preconstruction survey shall be reported to the CPM, USFWS, and CDFG, even if no snakes are observed.

- 4) Avoid obstructing the flow of water through the canals (dewatering). Any dewatered habitat must remain dry for at least 15 consecutive days after April 15 and 15 consecutive days prior to excavating or filling dewatered habitat.
- 5) Prevent runoff from construction activities from entering giant garter snake habitat.
- 6) Restrict vegetation clearing to the minimal area necessary to facilitate construction activities. ~~Mark and avoid giant garter snake habitat in or adjacent to the project that will not be directly affected by construction activities.~~
- 7) Provide replacement habitat at a location acceptable to USFWS and CDFG to compensate for habitat lost (BIO-13).
- 8) Mow, rather than disk, to control vegetation on-site. Mower blades should be raised to at least 6 inches during the snake's active period of May 1 to October 1.
- 9) Conduct activities to clear vegetation in the irrigation canals as necessary to minimize disturbance to snake habitat and in accordance with methods approved by CDFG and USFWS.
- 10) Eliminate wastewater discharge as described in Condition **SOILS&WATER-2**.
- 11) Check for Snakes Under Vehicles. The Designated Biologist as well as all construction personnel shall visually check for snakes under parked vehicles and equipment within giant garter snake habitat area prior to moving them. If snakes or other listed species are observed by crews, construction personnel will contact the Designated Biologist.**
- 12) Snake fencing/Silt fencing. If excavation pits will be left open for multiple days, silt fencing (geotextile filter fabric on wooden stakes) or an agency-approved alternative shall be installed (and partially buried per standard specifications) on the ditch side of the excavation pits to keep snakes and other wildlife from entering the pits. The Designated Biologist or approved Biological Monitor shall inspect any open trenches daily within 200 feet of aquatic habitat for trapped snakes.**
- 13) Spoil Placement. To prevent burying, trapping, or crushing giant garter snakes , spoil from project operations shall not be placed on or near the canal banks where there is a risk of covering rodent burrows or bank-top soil crevices.**
- 14) Giant Garter Snake Encounters. If a giant garter snake is encountered during construction or preconstruction surveys, activities shall cease**

at that work area until the appropriate corrective measures have been completed, the animal has moved out of the work area on its own, or it has been determined that the snake will not be harmed. Sightings, work stoppage, and any incidental take will be immediately reported to the CPM, USFWS at (916) 414-6600, and CDFG's Lake or Streambed Alteration Program contact listed previously. A California Natural Diversity Database field form shall be submitted to CDFG for all giant garter snake sightings. Sightings shall also be documented in Monthly Compliance Reports.

15) Site Restoration. All exposed/disturbed areas (comprising approximately 16.37 acres of temporary impacts to aquatic rice field and upland habitat) and access points within the stream zone left barren of vegetation as a result of the construction activities shall be restored to pre-project conditions using locally native grass seeds, locally native grass plugs and/or a mix of quick growing sterile non-native grass with locally native grass seeds. Seeded areas shall be covered with broadcast straw and/or jute netted (monofilament erosion blankets are not authorized). The project owner shall conduct quarterly monitoring surveys of all restored habitat for one year from the date construction is completed and provide an annual monitoring report (following USFWS Appendix D guidelines) to the CPM, USFWS, and CDFG including pre- and post-photographs.

16) Speed Limits. Where practical and safe to do so and to minimize the effects of increased traffic in the construction area, vehicle speed within giant garter snake habitat areas of the project shall be limited to 15 mph on unimproved access routes and roadways to avoid running over snakes.

Speed limit signs will be posted on all project-controlled roads leading to construction areas.

Verification: At least 45 days prior to rough grading, the project owner shall provide to the CPM for review and approval written documentation (BRMIMP, BIO-12) that the above measures will be or have been accomplished by the licensee and specifying the procedures used or that will be used to implement these measures.

Within 10 days of completing the GGS pre-construction survey, the project owner shall submit a letter report documenting results of the survey to the CPM with copies to the USFWS and CDFG.

Within 10 days prior to the start of any ground-disturbing activities, the project owner shall provide documentation to the CPM that the avoided aquatic giant garter snake habitat in the immediate construction zone has been flagged as Environmentally Sensitive Area(s).

The project owner shall report any GGS sightings, work stoppage, and any incidental take to the CPM, USFWS at (916) 414-6600, and CDFG's Lake or Streambed Alteration Program contact listed previously within two (2) business

days of the event. A California Natural Diversity Database field form shall be submitted to CDFG for all giant garter snake sightings within 10 days of GGS sighting within the construction area.

Within 30 days of completing the fourth quarter monitoring survey of temporarily disturbed/restored habitat areas, the project owner shall submit an annual monitoring report (USFWS Appendix D) to the CPM, USFWS, and CDFG including pre- and post-photographs.

All mitigation measures and their implementation methods shall be included in the BRMIMP. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

BIO-9 Swainson's hawk and Other Migratory Bird Treaty Act-protected Bird Species

Within 30 days prior to the start of construction activities, the Designated Biologist shall conduct a preconstruction surveys ~~if construction is to occur during anytime from~~ March 15 through August 15 ~~June during construction years~~ to determine if an active Swainson's hawk nest site is within the project construction area or within a 0.5-mile buffer area of construction activities. If an active Swainson's hawk nest is found, the Designated Biologist shall monitor construction activities that occur within 0.50-mile of an active nest site between March 1 and August 15 or until fledglings are no longer dependent on the nest tree. The Designated Biologist shall also conduct a pre-construction survey in all riparian or marsh habitat associated with irrigation ditches located within 200 feet of construction activities for active bird nests or nesting bird activity. No trees or shrubs that contain active bird nests shall be disturbed until all eggs have hatched and young birds have fledged. If active nests or suspected active songbird nests are found within 200 feet of construction areas, the Designated Biologist shall consult with CDFG on the need for a buffer zone (protected area around the nest where construction activities are not allowed).

~~2) Design the project to avoid removal of nest trees and to avoid placement of the transmission line within 0.1 mile of nest trees.~~

~~3) The designated biologist shall monitor construction activities that occur within 0.5 mile of an active nest site between March 1 and August 15 or until fledglings are no longer dependent on the nest tree. The monitoring plan shall be acceptable to CDFG.~~

~~4) Provide replacement habitat at a location acceptable to CDFG to compensate for the loss of habitat (BIO-13).~~

~~5) Protect on-site Swainson's hawk foraging habitat not taken by the power plant foot print in perpetuity or provide replacement habitat at a location and ratio acceptable to CDFG and establish an endowment account adequate to provide funds for the perpetual maintenance and management of the replacement habitat.~~

Verification: At least 45 days prior to rough grading, the project owner shall provide to the project CPM for review and approval written documentation (BRMIMP, BIO-12) that the above measures will be accomplished by the applicant and specifying the procedures used or that will be used to implement these measures.

Within 10 days of completing the preconstruction Swainson's hawk and nesting bird survey, the Designated Biologist shall submit a letter report to the CPM with copy to CDFG documenting the results of the nesting bird survey including a figure with nest locations (if found) and implemented avoidance buffers.

If a Swainson's hawk nest is identified within 0.50-mile of project construction areas, the project owner shall notify the CPM and CDFG North Central Region office within two (2) business days.

If any nests are identified during the preconstruction nesting bird survey, all mitigation measures and their implementation methods shall be included in the BRMIMP. Implementation of nest monitoring measures shall be reported in the Monthly Compliance Reports by the Designated Biologist.

BIO-11 The project owner shall ensure the following measures are implemented to mitigate or avoid project impacts to wetlands:

- 1) Provide in-kind replacement habitat at a location acceptable to USFWS for wetlands impacted by the project (BIO-13).
- 2) Establish an endowment account adequate to provide funds for the perpetual maintenance and management of the replacement habitat.
- 3) Mark and avoid all wetlands on site that will not be directly taken by the power plant footprint and all wetlands along Hughes Road in the Sutter National Wildlife Refuge.
- 4) Protect on-site wetlands not taken by the power plant footprint in perpetuity or provide replacement habitat at a location and ratio acceptable to USFWS and establish an endowment account adequate to provide funds for the perpetual maintenance and management of the replacement habitat.
- 5) Use an air-cooled condenser to eliminate wet cooling tower evaporation and incorporate drains designed to route contaminated runoff away from the remaining wetlands or develop and implement a monitoring program to ensure the wetlands remaining on-site are not degraded by project operations. The program shall include parameters acceptable to USFWS that monitor hydrologic quality and productivity, and identify and defend reference or control wetlands for comparative analysis. If it is determined

that the on-site wetlands are being negatively impacted, propose remedial mitigation measures to be implemented. A report presenting the monitoring data and a discussion of the mitigation effectiveness shall be provided annually for the life of the project. If it can be shown that the wetlands are not being negatively impacted, licensee has the option to request Staff to decrease the frequency or cease monitoring.

- 6) Place a construction cloth over all remaining wetlands located within 500 feet of construction and related roads during construction activities.
- 7) Place the pipeline under or in the shoulder of Hughes Road.
- 8) The project owner shall incorporate all special permit conditions identified in the Corps authorization letter dated August 2, 2011, specifically, the special condition to submit a check for \$1,800.00 to the National Fish and Wildlife Foundation's (NFWF) Sacramento District Wetlands Conservation Fund to mitigate for the loss of 0.012-acre of riparian streambed.**

Verification: At least 45 days prior to rough grading, the project owner shall provide to the project CPM for review and approval written documentation (BRMIMP, BIO-12) that the above measures will be accomplished by the licensee and specifying the procedural terms for implementing these measures. The wetland monitoring plan annual report shall be provided to the project CPM no later than July 1 for each year monitoring is completed.

At least 30 days prior to the start of any ground-disturbing activities, the project owner shall provide written verification to the CPM that payment for the loss of riparian streambed was made and received by NFWF.

The project owner shall notify the CPM with a copy to the Corps Sacramento Regulatory Division office of the start and completion dates for each phase of the authorized work 30 days prior to the initiation of construction activities within Waters of the U.S. and 30 days following completion of construction activities. All work activities that occur in Waters of the U.S. shall be described and summarized in each Monthly Compliance Report.

BIO-12 Biological Resources Mitigation Implementation and Monitoring Plan

The project owner shall submit to the CPM for review and approval a copy of the final Biological Resources Mitigation Implementation and Monitoring Plan. The Biological Resources Mitigation Implementation and Monitoring Plan shall identify:

1. all sensitive biological resources to be impacted, avoided, or mitigated by project construction and operation;
2. all conditions agreed to in the USFWS Biological Opinion and ~~CDFG Endangered Species Memorandum of Understanding~~;
3. all mitigation, monitoring and compliance conditions included in the Commission's Final Decision;

4. all conditions agreed to in the USACE Clean Water Act Permits;
5. all conditions specified in the CDFG Streambed Alteration Permit, **including the following administrative procedures identified in the Final SAA:**
 - **DOCUMENTATION AT PROJECT SITE. Included as an appendix to the BRMIMP, the project owner shall make the SAA, any extensions and amendments to the SAA, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to the CPM, CDFG, USFWS, or personnel from another state, federal, or local agency upon request. The project owner shall provide copies of the SAA and any extensions and amendments to the SAA to all persons who will be working on the project site on behalf of the project owner, including but not limited to contractors, subcontractors, inspectors, and monitors.**
 - **NOTIFICATION OF CONFLICTING PROVISIONS. While preparing the BRMIMP, the project owner shall notify the CPM with copy to CDFG if the project owner determines or learns that a provision in the SAA might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, the CPM shall contact the project owner to resolve any conflict.**
 - **PROJECT SITE ENTRY. The project owner agrees that the CPM and personnel from the USFWS and CDFG may enter the project site at any time to verify compliance with the SAA or BO. This shall be stated in the BRMIMP.**

if required;

6. required mitigation measures for each sensitive biological resource;
7. required habitat compensation, including provisions for acquisition, enhancement and management, for any loss of sensitive biological resources;
8. a detailed plan for protecting the existence and monitoring the integrity of the wetlands remaining on-site;
9. a detailed description of measures that will be taken to avoid or mitigate temporary disturbances from construction activities;
10. all locations, on a map of suitable scale, of laydown areas and areas requiring temporary protection and avoidance during construction;
11. aerial photographs of all areas to be disturbed during project construction activities - one set prior to site disturbance and one set subsequent to completion of mitigation measures. Include planned timing of aerial photography and a description of why times were chosen;
12. monitoring duration for each type of monitoring and a description of monitoring methodologies and frequency;

13. performance standards to be used to help decide if/when proposed mitigation is or is not successful;
14. all remedial measures to be implemented if performance standards are not met; and
15. a process for proposing plan modifications to the CPM and appropriate agencies for review and approval.

Verification: At least ~~30~~ 45 days prior to **any ground disturbing activities** rough grading, the project owner shall provide the CPM with **a draft** the final version of the Biological Resources Mitigation Implementation and Monitoring Plan for this project **for review and comment. The CPM shall coordinate as necessary with USFWS and CDFG on any biological monitoring issues. Within 10 days prior to the start of ground disturbing activities, the project owner shall provide the CPM with a final copy of the approved BRMIMP with agency comments incorporated.**, and the CPM will determine the plan's acceptability within 15 days of receipt of the final plan.

The project owner shall notify the CPM within five working days before implementing any modifications to the Biological Resource Mitigation Implementation and Monitoring Plan.

Within 30 days after completion of construction, the project owner shall provide to the CPM, for review and approval, a written report identifying which items of the Biological Resource Mitigation Implementation and Monitoring Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which condition items are still outstanding.

BIO-14 Valley Elderberry Longhorn Beetle

The project owner shall install high visibility fencing at least 20 feet from the dripline of the single elderberry shrub which occurs approximately 75 feet from the proposed pipeline alignment, within Riparian Drainage #10. The Designated Biologist or approved Biological Monitor shall monitor the shrub and fencing at least weekly during construction to be sure equipment is not impacting the shrub and to ensure the fencing is staying intact.

Verification: At least 10 days prior to the start of any ground-disturbing activities, the project owner shall provide photographic documentation to the CPM that the fencing has been installed around the shrub. Implementation of this measure including monitoring of the shrub during construction shall be reported in the Monthly Compliance Reports by the Designated Biologist or Biological Monitor.

CUL-15 CONSTRUCTION OF GRIMES PIPELINE PROJECT

CUL-15.1. CULTURAL RESOURCES PERSONNEL

Prior to the start of project construction (defined as any construction-related vegetation clearance, ground disturbance and preparation, and site excavation activities) for the Grimes Pipeline project, the project owner shall obtain the services of a Cultural Resources Specialist (CRS) and may, in addition, obtain the services of one or more CRS alternates. The project owner shall submit the resumes and qualifications for the CRS, and any CRS alternates or technical specialists to the CPM for review and approval.

The CRS or any subsequent CRS alternate shall, on behalf of the project owner, have the sole responsibility for the implementation of the Cultural Resources Conditions of Certification (Conditions) (CUL-1–CUL-15) in a manner that is consistent with the terms of those conditions and with the terms of the General Conditions. The CRS or any subsequent CRS alternate may elect to obtain the services of Cultural Resources Monitors (CRMs) or other technical specialists, as needed, to assist in the implementation of the Conditions. The project owner shall ensure that the CRS or any subsequent CRS alternate makes recommendations on the California Register of Historical Resources (CRHR) eligibility of any new cultural resources that are found during the construction of the Grimes Pipeline project, or on any known cultural resources that the CRS or any subsequent CRS alternate determines to have the potential to be affected in an unanticipated manner. No ground disturbance related to the Grimes Pipeline project shall occur prior to Compliance Project Manager (CPM) approval of the CRS and alternates, unless such activities are specifically approved by the CPM.

Approval of a CRS or CRS alternate may be denied or revoked for reasons including, but not limited to, a demonstrable history of difficulty complying with license conditions for other Energy Commission power projects. After all ground disturbance related to the Grimes Pipeline project has been completed, and the CRS has fulfilled all responsibilities specified in this condition, the project owner may discharge the CRS, upon the approval of the CPM. With the discharge of the CRS, this cultural resources condition would no longer apply to the routine operation and maintenance of the constructed pipeline.

CULTURAL RESOURCES SPECIALIST

The resumes for the CRS and alternate(s) shall include information demonstrating to the satisfaction of the CPM that their training and backgrounds conform to the U.S. Secretary of Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, part 61 (36 C.F.R., part 61) for prehistoric archaeology. In addition, the CRS shall have the following qualifications:

- The CRS's qualifications shall include demonstrated professional experience in ethnology, anthropological archaeology, public history, and architectural history;
- At least three years of field experience variably identifying, evaluating the historical significance of, and salvaging representative datasets from archaeological resources in California; and
- At least one year of supervisory experience in California as a regulatory archaeologist where such experience has demonstrably provided the training and knowledge necessary to make informed and reasoned recommendations on the historical significance of the types of archaeological resources that may be found in the project area for the Grimes Pipeline project.

The resumes of the CRS and CRS alternates shall include the names and telephone numbers of contacts familiar with the work of the CRS and any proposed CRS alternates on referenced projects and demonstrate to the satisfaction of the CPM that the CRS and CRS alternates have sufficient training and experience to effectively implement the Conditions.

CULTURAL RESOURCES MONITORS

CRMs shall have the following qualifications:

- A BS or BA degree in anthropology, archaeology, or a related field, and one year of archaeological monitoring experience in California; or
- An AS or AA degree in anthropology, archaeology, or a related field, and four years of archaeological monitoring experience in California; or
- Enrollment in upper division classes pursuing an undergraduate degree in the fields of anthropology, archaeology, or a related field, and two years of archaeological monitoring experience in California.

CULTURAL RESOURCES TECHNICAL SPECIALISTS

The resume(s) of any proposed additional technical specialist(s), such as historical archaeologists, historians, architectural historians, or physical anthropologists, shall be submitted to the CPM for review and approval. [V15.1-1–V15.1-6]

CUL-15.2. CULTURAL RESOURCES INFORMATION FOR THE GRIMES PIPELINE PROJECT

Prior to the start of project construction, if the CRS has not previously worked on the project, the project owner shall provide the CRS with copies of the AFC, the Grimes Pipeline project amendment, data

responses, confidential cultural resources reports, any supplements, the Staff Analysis (SA) for the amendment, and the cultural resources section of the Final Decision on the amendment, including all cultural resources Conditions of Certification, for the project. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:2400 or 1" = 200') for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review map submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. Project construction shall not commence prior to CPM approval of maps and drawings, unless such activities are specifically approved by the CPM.

If construction of the project would proceed in phases, maps and drawings not previously provided shall be provided to the CRS and CPM prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

Weekly, until project construction is completed, the project construction manager shall provide to the CRS and CPM a schedule of project activities for the following week, including the identification of area(s) where project construction will occur during that week.

The project owner shall notify the CRS and CPM of any changes to the proposed scheduling of the construction phases. [V15.2-1–V15.2-5]

CUL-15.3. CULTURAL RESOURCES MONITORING AND MITIGATION PLAN FOR THE GRIMES PIPELINE PROJECT

Prior to the start of project construction, the project owner shall submit a Cultural Resources Monitoring and Mitigation Plan (CRMMP) for the subject project, as prepared by or under the direction of the CRS, to the CPM for review and approval. The CRMMP shall follow the content and organization of the draft model CRMMP, provided by the CPM, and the authors' name(s) shall appear on the title page of the CRMMP. The CRMMP shall identify measures to minimize potential impacts to sensitive cultural resources. Implementation of the CRMMP shall be the responsibility of the CRS and the project owner. Copies of the CRMMP shall reside with the CRS, alternate CRS, each CRM, and the project owner's on-site construction manager. No project construction shall commence prior to CPM approval of the CRMMP, unless such activities are specifically approved by the CPM.

The CRMMP shall include, but not be limited to, the following elements and measures:

1. **The following statement included in the Introduction: “Any discussion, summary, or paraphrasing of the Conditions of Certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the Conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP. The Cultural Resources Conditions of Certification from the Commission Decision are contained in Appendix A.”**
2. **A proposed general research design that includes a discussion of archaeological research questions and testable hypotheses specifically applicable to the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. The research design will specify that the preferred treatment strategy for any buried archaeological deposits is avoidance. A specific mitigation plan shall be prepared for any unavoidable impacts to any CRHR-eligible (as determined by the CPM) resources. A prescriptive treatment plan may be included in the CRMMP for limited data types.**
3. **Specification of the implementation sequence and the estimated time frames needed to accomplish all project-related tasks during the ground-disturbance and post-ground-disturbance analysis phases of the project.**
4. **Identification of the person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team.**
5. **A description of the manner in which Native American observers or monitors will be included, the procedures to be used to select them, and their role and responsibilities.**
6. **A description of all impact-avoidance measures (such as flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation, and identification of areas where these measures are to be implemented. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related effects.**
7. **A statement that all encountered cultural resources over 50 years old shall be recorded on Department of Parks and Recreation (DPR) 523 forms and mapped and photographed. In addition, all archaeological materials retained as a result of the archaeological**

investigations (survey, testing, data recovery) shall be curated in accordance with the California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections, into a retrievable storage collection in a public repository or museum.

8. A statement that the project owner will pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project. The project owner shall identify three possible curation facilities that could accept cultural resources materials resulting from project activities.
9. A statement demonstrating when and how the project owner will comply with Health and Human Safety Code 7050.5(b) and Public Resources Code 5097.98(b) and (e).
10. A statement that the CRS has access to equipment and supplies necessary for site mapping, photography, and recovery of any cultural resource materials that are encountered during ground disturbance and cannot be treated prescriptively.
11. A description of the contents, format, and review and approval process of the final Cultural Resource Report (CRR), which shall be prepared according to ARMR guidelines. [V15.3-1-V15.3-4]

CUL-15.4. SUPPLEMENT TO THE FINAL CULTURAL RESOURCES REPORT FOR THE GRIMES PIPELINE PROJECT

The project owner shall submit a Supplement to the Final Cultural Resources Report (SCRR) to the CPM for review and approval. The SCRR shall be written by or under the direction of the CRS and shall be provided in the ARMR format. The SCRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, DPR 523 forms, geoarchaeological final reports, data recovery reports, and any additional research reports not previously submitted to the California Historical Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as appendices to the SCRR.

If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft SCRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM for review and approval on the same day as the suspension/extension request. The draft SCRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final SCRR shall be submitted to the CPM for

review and approval at the same time as the withdrawal request. [V15.4-1-V15.4-3]

CUL-15.5. EMPLOYEE TRAINING PROGRAM FOR THE GRIMES PIPELINE PROJECT

Prior to the start of project construction the project owner shall ensure that the CRS develops and conducts a new employee training program for the Grimes Pipeline Project. The new program shall follow the direction set out in CUL-5 and CUL-6 above, except that the Western Area Power Administration (Western) is no longer required to be a party to the employee training process. [V15.5-1]

CUL-15.6. ARCHAEOLOGICAL MONITORING FOR THE GRIMES PIPELINE PROJECT

Prior to the start of project construction, the project owner shall notify the CPM of the date on which ground disturbance will ensue. The project owner shall ensure that the CRS, alternate CRS, or CRMs monitor, full time, all ground disturbance along the pipeline alignment, and at laydown areas, roads, and other ancillary areas, to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner.

Full-time archaeological monitoring for this project shall be the archaeological monitoring of ground-disturbing activities in the areas specified in the paragraph immediately above, for as long as the activities are ongoing. Where excavation equipment is actively removing dirt and hauling the excavated material farther than fifty feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one monitor shall observe the location of active excavation and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than fifty feet from the location of active excavation, one monitor shall both observe the location of active excavation and inspect the dumped material.

The project owner shall obtain the services of one or more Native Americans to monitor all ground disturbance related to project construction. Contact lists of interested Native Americans and guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area where the project is located, but the project owner shall make a reasonable and good faith effort to accommodate equally all groups expressing the desire to monitor. If efforts to obtain the services of at least one qualified Native American monitor, acceptable to all groups that want monitoring, are unsuccessful, the project owner shall immediately inform the CPM. The

CPM may either identify potential monitors or allow ground disturbance to proceed without a Native American monitor.

The research design in the CRMMP developed under CUL-15.3 shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered.

On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-compliance with the Conditions and/or applicable LORS. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM.

In the event that the CRS believes that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring.

The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural resources monitoring and mitigation activities with Energy Commission technical staff.

Cultural resources monitoring activities are the responsibility of the CRS. Any interference with monitoring activities, removal of a monitor from duties assigned by the CRS, or direction to a monitor to relocate monitoring activities by anyone other than the CRS shall be considered non-compliance with these Conditions.

Upon becoming aware of any incidents of non-compliance with the Conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM by telephone or e-mail within 24 hours. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the Conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM. [V15.6-1-V15.6-6]

CUL-15.7. CULTURAL RESOURCE DISCOVERY AND THE GRIMES PIPELINE PROJECT

The project owner shall grant authority to halt ground disturbance to the CRS, alternate CRS, and the CRMs in the event of a discovery. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event that a cultural resource over 50 years of age is found (or if younger, and determined exceptionally significant by the CPM), or impacts to such a resource can be anticipated, ground disturbance shall be halted or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. If the discovery includes human remains, the project owner shall comply with the requirements of Health and Safety Code, section 7050.5(c) and Public Resources Code, section 5097.98, and shall notify the CPM and the NAHC of the discovery of human remains. Monitoring and daily reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere. The halting or redirection of ground disturbance shall remain in effect until the CRS has visited the discovery, and all of the following have occurred:

1. The CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of CRHR eligibility, and recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.
2. If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.
3. The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary" form shall include a recommendation on the CRHR eligibility of the discovery. The project owner shall submit completed forms to the CPM.
4. The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.

Ground disturbance may resume only with the approval of the CPM. [V15.7-1 –V15.7-3]

VERIFICATIONS:

CUL-15.1 CULTURAL RESOURCES PERSONNEL

V.15.1-1 At least 45 days prior to the start of project construction, the project owner shall submit the resumes for the CRS, and any CRS alternate(s) if desired, to the CPM for review and approval.

V.15.1-2. At least 10 days prior to a termination or release of the CRS, or within 10 days after the resignation of a CRS, the project owner shall submit the resume of the proposed new CRS, if different from the CRS alternate, to the CPM for review and approval. At the same time, the project owner shall also provide to the proposed new CRS the AFC and all cultural resources documents, field notes, photographs, and other cultural resources materials generated by the project. If no CRS alternate is available to assume the duties of the CRS, the project owner shall designate a CRM to serve in place of a CRS for a maximum of 3 days. If cultural resources are discovered, project construction will remain halted until there is a CRS or CRS alternate to make a recommendation regarding significance.

V.15.1-3. At least 20 days prior to the start of project construction, the CRS shall provide a letter naming CRMs and attesting that the identified CRMs meet the minimum qualifications for cultural resources monitoring required by this condition.

V.15.1-4. At least 5 days prior to additional CRMs beginning on-site duties during the project, the CRS shall provide letters to the CPM identifying the new CRMs and attesting to their qualifications.

V.15.1-5 At least 10 days prior to any technical specialists, other than CRMs, beginning tasks, the resume(s) of the specialists shall be provided to the CPM for review and approval.

V15.1-6. At least 10 days prior to the start of project construction, the project owner shall confirm in writing to the CPM that the approved CRS will be available for onsite work and is prepared to implement the cultural resources conditions.

CUL-15.2 CULTURAL RESOURCES INFORMATION FOR THE GRIMES PIPELINE PROJECT

V.15.2-1. At least 40 days prior to the start of project construction, the project owner shall provide the AFC, the Grimes Pipeline project amendment, data responses, confidential cultural resources reports, any supplements, the Staff Analysis (SA) for the amendment, and the cultural resources section of the Final Decision on the amendment, including all cultural resources Conditions of Certification, for the project to the CRS, if needed, and the subject maps and drawings to the CRS and CPM. The CPM will review submittals in consultation

with the CRS and approve maps and drawings suitable for cultural resources planning activities.

V.15.2-2. At least 15 days prior to the start of project construction, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS and CPM.

V.15.2-3. At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS and CPM.

V.15.2-4. Weekly, during project construction, a current schedule of anticipated project activity shall be provided to the CRS and CPM by letter, e-mail, or fax.

V.15.2-5. Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide written notice of the changes to the CRS and CPM.

CUL-15.3. CULTURAL RESOURCES MONITORING AND MITIGATION PLAN FOR THE GRIMES PIPELINE PROJECT

V.15.3-1. Upon approval of the CRS proposed by the project owner, the CPM will provide to the project owner an electronic copy of the draft model CRMMP for the CRS.

V.15.3-2. At least 30 days prior to the start of project construction, the project owner shall submit the CRMMP to the CPM for review and approval.

V.15.3-3. At least 30 days prior to the start of project construction, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).

V.15.3-4. Within 90 days after completion of project construction (including landscaping), if cultural materials requiring curation were generated or collected, the project owner shall provide to the CPM a copy of an agreement with, or other written commitment from, a curation facility that meets the standards stated in the California State Historical Resources Commission's *Guidelines for the Curation of Archaeological Collections*, to accept the cultural materials from this project. Any agreements concerning curation will be retained and available for audit for the life of the project.

CUL-15.4. SUPPLEMENT TO THE FINAL CULTURAL RESOURCES REPORT FOR THE GRIMES PIPELINE PROJECT

V.15.4-1. Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft SCRR to the CPM for review and approval.

V.15.4-2. Within 90 days after completion of project construction (including landscaping), the project owner shall submit the final SCRR to the CPM for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included as an appendix.

V.15.4-3. Within 10 days after CPM approval of the SCRR, the project owner shall provide documentation to the CPM confirming that copies of the final SCRR have been provided to the SHPO, the CHRIS, the curating institution, if archaeological materials were collected, and to the Tribal Chairpersons of any Native American groups requesting copies of project-related reports.

CUL-15.5. EMPLOYEE TRAINING PROGRAM FOR THE GRIMES PIPELINE PROJECT

V.15.5-1. The project owner shall adhere to the verifications for CUL-5 and CUL-6, above, as they relate to the construction of the Grimes Pipeline project and with the caveat that Western is not required to be a part of the new employee training program.

CUL-15.6. ARCHAEOLOGICAL MONITORING FOR THE GRIMES PIPELINE PROJECT

V.15.6-1. At least 30 days prior to the start of project construction, the CPM will notify all Native Americans with whom the Energy Commission communicated during the project review of the date on which the project's project construction will begin.

V.15.6-2. At least 30 days prior to the start of project construction, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log.

V.15.6-3. Monthly, while monitoring is on-going, the project owner shall include in each MCR a copy of the monthly summary report of cultural resources-related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.

V.15.6-4. At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.

V.15.6-5. Daily, as long as no cultural resources are found, the CRS shall provide a statement that "no cultural resources over 50 years of age

were discovered” to the CPM as an e-mail or in some other form of communication acceptable to the CPM.

V.15.6-6. At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or e-mail (or some other form of communication acceptable to the CPM) detailing the CRS’s justification for reducing or ending daily reporting.

CUL-15.7. CULTURAL RESOURCE DISCOVERY AND THE GRIMES PIPELINE PROJECT

V.15.7-1. At least 30 days prior to the start of project construction, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, alternate CRS, and CRMs have the authority to halt project construction in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.

V.15.7-2. Unless the discovery can be treated prescriptively, as specified in the CRMMP, completed DPR 523 forms for resources newly discovered during project construction shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural resource.

V.15.7-3. Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all Native American groups that expressed a desire to be notified in the event of such a discovery, and the CRS must inform the CPM when the notifications are complete.

~~**PAL-1** Prior to the start of project construction (defined as any construction-related vegetation clearance, ground disturbance and preparation, and site excavation activities), the project owner shall provide the California Energy Commission Compliance Project Manager (CPM) with the name(s) and qualifications of its designated paleontologic resources specialist and mitigation team members.~~

~~The designated paleontologic resources specialist shall be responsible for implementing all the Conditions of Certification and for using qualified personnel to assist him or her in project-related field surveys; monitoring; fossil stabilization, removal, and transport; data collection and mapping; direction and implementation of mitigation procedures; matrix sampling, screen washing, and other micro-fossil recovery techniques; preparation and analysis of recovered fossils and data; identification and inventory of recovered fossils; preparation of recovered fossils for delivery and curation; and report preparation.~~

~~After CPM approval of the Paleontologic Resources Monitoring and Mitigation Plan, described below in Condition PAL-4, the designated paleontologic resources specialist and team shall be available to implement the mitigation plan prior to, and throughout construction of the project.~~

~~Protocol: The project owner shall provide the CPM with a resume or statement of qualifications for its designated paleontologic resources specialist and mitigation team members. The resume(s) shall include the following information:~~

- ~~1) The resume for the designated paleontologic resource specialist shall demonstrate that the specialist meets the following minimum qualifications: a graduate degree in paleontology or geology, or paleontologic resource management; at least three years of paleontologic resource mitigation and field experience in California, including at least one year's experience leading paleontologic resource field surveys; leading site mapping and data recording; marshalling and use of equipment necessary for fossil recovery, sampling, and screen washing; leading fossil recovery operations; preparing recovered materials for analysis and identification; recognizing the need for appropriate sampling and/or testing in the field and in the lab; directing the analyses of mapped and recovered fossil materials; completing the identification and inventory of recovered fossil materials; and the preparation of appropriate reports to be filed with the receiving curation repository, the University Museum of Paleontology at Berkeley, all appropriate regional information center(s), and the Commission.~~
- ~~2) The resume for the designated paleontologic resource specialist shall include a list of specific projects the specialist has previously worked on; the role and responsibilities of the specialist for each project listed; and the names and phone numbers of contacts familiar with the specialist's work on these referenced projects.~~
- ~~3) If additional personnel will be assisting the designated paleontologic resources specialist in project-related field surveys, monitoring, data and fossil recovery, mapping, mitigation, fossil analysis, or report preparation, the project owner shall also provide names, addresses, and resumes for these paleontology resource team members.~~
- ~~4) If the CPM determines that the qualifications of the proposed paleontologic resources specialist are not in concert with the above requirements, the project owner shall submit another individual's name and qualifications for consideration.~~
- ~~5) If the previously approved, designated paleontologic resources specialist is replaced prior to completion of project mitigation, the project owner shall obtain CPM approval of the new designated paleontologic resources specialist by submitting the name and qualifications of the proposed replacement to the CAM, at least ten (10) days prior to the termination or release of the preceding designated paleontologic resources specialist.~~

~~Verification: At least ninety (90) days prior to the start of construction on the project, the project owner shall submit the name and resume for its designated~~

~~paleontologic resources specialist, to the CPM for review and approval. The CPM shall provide written approval or disapproval of the proposed paleontologic resources specialist.~~

~~Thirty (30) days prior to start of construction, the project owner shall confirm in writing to the CPM that the previously approved, designated paleontologic resources specialist and the team of assistants are prepared to implement the monitoring and mitigation measures for paleontologic resources, as described in the CPM-approved Paleontologic Resources Monitoring and Mitigation Plan, prepared per Condition PAL-4, below.~~

~~At least ten (10) days prior to the termination or release of a designated paleontologic resource specialist, the project owner shall obtain CPM approval of the new designated paleontologic resource specialist by submitting to the CPM the name and resume of the proposed replacement specialist.~~

PAL-1 The project owner shall provide the Compliance Project Manager (CPM) with the resume and qualifications of its Paleontological Resource Specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the Paleontological Resources Report, the project owner shall obtain CPM approval of the replacement PRS. The project owner shall keep resumes on file for qualified Paleontological Resource Monitors (PRMs). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM.

The PRS resume shall include the names and phone numbers of references. The resume shall also demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the required paleontological resource tasks.

As determined by the CPM, the PRS shall meet the minimum qualifications for a vertebrate paleontologist as described in the Society of Vertebrate Paleontology (SVP) guidelines of 1995. The experience of the PRS shall include the following:

- 1. institutional affiliations, appropriate credentials, and college degree;**
- 2. ability to recognize and collect fossils in the field;**
- 3. local geological and biostratigraphic expertise;**
- 4. proficiency in identifying vertebrate and invertebrate fossils; and**
- 5. at least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.**

The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems

necessary on the project. Paleontologic Resource Monitors (PRMs) shall have the equivalent of the following qualifications:

BS or BA degree in geology or paleontology and one year of experience monitoring in California; or AS or AA in geology, paleontology, or biology and two years' experience monitoring in California; or enrollment in upper division classes pursuing a degree in the fields of geology or paleontology.

Monitors with lesser experience levels may be approved by the CPM, on a case-by-case basis, provided the proposed monitor will be working under the direct supervision of an approved monitor with the required credentials.

Verification:

(1) At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for onsite work.

(2) At least 20 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated monitors for the project, stating that the identified monitors meet the minimum qualifications for paleontological resource monitoring required by the condition. If additional monitors are obtained during the project, the PRS shall provide additional letters and resumes to the CPM. The letter shall be provided to the CPM no later than one week prior to the monitor's beginning onsite duties.

(3) Prior to the termination or release of a PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

PAL-8 The designated paleontologic resource specialist **monitor** shall be present at all times to monitor construction-related grading, excavation, trenching, and/or augering in areas where remnant river terrace deposits have been found.

These terrace remnants have been generally correlated with soils of the Conejo-Tisdale group and Pleistocene-age fossil materials may be present. Project areas where the terrace deposits may be found include the power plant site, the Sutter Bypass switching station site, portions of the 16-inch natural gas pipeline route, and the electric transmission line route. Using the mile posts and boundary stakes placed by the project owner, the designated paleontologic resource specialist shall monitor the route of the 16-inch natural gas pipeline, between Mile Post (MP) 0.00 to MP 2.07; MP 3.58 to MP 3.70; and MP 4.10 to MP 4.50. For the route of the 4.0-mile electric transmission line, areas to be monitored full-time are MP 0.00 to MP 1.40; and MP 1.80 to MP 2.60.

Other sections of the linear facility routes may be monitored as deemed necessary by the designated paleontologic resources specialist.

Verification: The project owner shall include in the Monthly Compliance Reports to the CPM, a summary of the daily logs prepared by the designated paleontologic resource specialist.

WASTE-4 **Prior to initiating any earthwork on the project site, the project owner shall prepare and submit to the Compliance Project Manager (CPM) for approval, a Soils Management Plan (SMP). The SMP should include but is not limited to the following:**

- **Land use history, including description and locations of known contamination;**
- **An earthwork schedule;**
- **The project owner shall describe methods which will be used to properly handle and/or dispose of soil which may be classified as hazardous or contain contaminants at levels of potential concern, including the identification of legal discharge areas;**
- **The SMP shall discuss, as necessary, the reuse of soil on site in accordance with applicable criteria to protect construction workers or future workers on site;**
- **A SMP summary report, which includes all analytical data and other findings, must be submitted once the earthwork has been completed.**

Verification: **At least 20 days prior to any earthwork, including those earthwork activities associated with the site mobilization, ground disturbance, or grading as defined in the general conditions of certification the project owner shall submit the Soils Management Plan to the CPM for approval.**

IT IS SO ORDERED.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of an Order duly and regularly adopted at a meeting of the California Energy Commission held on December 14, 2011.

AYE: Weisenmiller, Boyd, Douglas, Peterman

NAY: None

ABSENT: None

ABSTAIN: None

Date: _____

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

HARRIET KELLEMEYN
Secretariat