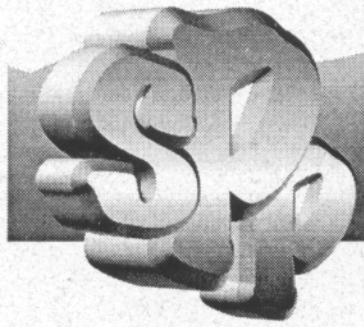

Appendix O

Complete Table of Conditions of Certification for the SPP (from Draft EIS, Presiding Members Decision and the Revised Presiding Members Proposed Decision)

Sierra Nevada Customer Service Region

California Energy Commission's
Conditions of Certification
Revised Presiding Members Proposed Decision
March, 1999

COC #	Description	Verification
	NEED CONFORMANCE (NO CONDITIONS)	
	AIR QUALITY	
AQ-1	As part of the requirements for Condition SOIL&WATER-3 for the preparation of a grading and erosion control plan for the project site, the project owner shall include and identify in that plan the following: ▪ the location of all paved roads, parking and laydown areas; ▪ the location of all roads, parking areas and laydown areas that are surfaced with gravel; ▪ the location of all roads, parking areas and laydown areas that are treated with magnesium chloride dust suppressant or equivalent; and ▪ the location of all dirt storage piles	At least 30 calendar days prior to the start of grading on the project site, the project owner shall submit for review and approval to the Commission Compliance Project Manager (CPM) in writing, and with construction drawings, a City/County of Sutter-approved erosion and sediment control plan. This plan shall include the delineation of the control measures discussed above for all roads, parking areas and laydown areas, and the location of all dirt storage piles.
AQ-2	The project owner shall perform the following mitigation measures during the construction phase of the project: a. The areas of disturbance within the construction site shall be watered so that they are visibly wet, twice or more daily, as necessary. This condition shall not apply on rainy days when precipitation exceeds 0.1 inch. b. Any graded areas where construction ceases shall be treated with a magnesium chloride (or equivalent) dust suppressant within fifteen days, or sooner if windy conditions create visible dust beyond the project site boundary. c. Magnesium chloride (or equivalent) dust suppressant or fabric covers shall be applied to any dirt storage pile within three days after the pile is formed, or sooner if windy conditions create visible dust beyond the project site boundary. d. Prior to entering public roadways, all truck tires shall be visually inspected and, if found to be dirty, cleaned of dirt using water spraying or methods of equivalent effectiveness, subject to CPM approval. e. At least 500 yards from construction site entrances, public roadways shall be cleaned on a weekly basis, or when there are visible dirt tracks on the public roadways, by either mechanical sweeping or water flushing. f. A speed limit sign shall be posted at the entrance of the construction site, to limit vehicle speed to no more than 15 miles per hour on unpaved areas. g. All construction equipment shall be properly maintained to detect and prevent mechanical problems that may cause excess emissions. h. No construction equipment shall be kept idling when not in use for more than 30 minutes.	The project owner shall maintain a daily log of water truck activities, including the number of gallons of water used to reduce the dust at the construction sites. A log or record of the frequency of public road cleaning shall also be maintained. These logs and records shall be available for inspection by the CPM during the construction period. The project owner shall identify, in the monthly construction reports, the area(s) that the project owner shall cover or treat with dust suppressants. The project owner shall make the construction site available to the District staff and the CPM for inspection and monitoring.
AQ-3	Prior to the start of construction (defined as any construction-related vegetation clearance, ground disturbance and preparation, and site excavation and soil remediation activities), the project owner shall provide the CPM with the following information: the name, telephone number, resume, and indication of availability of the on-site Environmental Coordinator. ***Protocol***: The resume shall include appropriate education and/or experience in Environmental management or coordination such as monitoring hazardous waste site remediation, experience as an inspector with an air pollution control district, or experience as an environmental health and safety project manager. The CPM will review the qualifications of, and must approve in writing, the project owner's designated Environmental Coordinator prior to the start of construction.	At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and written approval the information required above.

AQ-4	The on-site Environmental Coordinator shall be on-site every work day during site preparation. Duties: The on-site Environmental Coordinator shall inspect and ensure that all fugitive dust mitigation measures during the site preparation phase of construction are properly implemented including, but not limited to, the mitigation measures specified in Condition AQ-2. The primary responsibility of the Environmental Coordinator is to insure that no fugitive dust emissions are being emitted beyond the property line under control by the project owner.	The Environmental Coordinator will prepare a daily report of construction activities and appropriate fugitive dust mitigation measures employed by the project owner. A summary of the daily reports shall be included in the monthly compliance report to the CPM. If any complaints by the public are received, or if the project owner does not agree to comply with instructions given by the Environmental Coordinator, or if any other fugitive dust issue, in the judgment of the Environmental Coordinator, needs to be brought to the attention of the CPM, the Environmental Coordinator shall contact the CPM immediately.
AQ-5	The on-site Environmental Coordinator will exercise the authority to halt any on-site activity, temporarily stop activities, or direct activities to proceed under a modification of the mitigation requirements of Condition AQ-2, if, in the opinion of the Environmental Coordinator, the project owner is not complying with the requirements of Condition AQ-2 or fugitive dust emissions are noticed beyond the project boundary.	
AQ-6	For all utility trenching activities, the project owner shall implement the following control measures if necessary to prevent fugitive dust emissions: a. To top layer of soil shall be pre-wetted prior to excavation; b. Travel surfaces shall be wetted with the use of a water truck; and c. All exposed soil areas shall be wetted by the use of hose spraying.	District staff and the CPM may inspect utility trenching sites at any time to monitor compliance for this Condition.
AQ-7	The facility shall not discharge from any source whatsoever such quantities of air contaminants or other materials that cause a public nuisance. (District General ATC Permit Condition a).	As part of the semiannual Air Quality Reports (as required by AQ-43), the project owner shall include the date and time when any accidental release of air contaminants or other materials occur. The Air Quality Report shall also include the reason for the accidental release and measures taken to correct it.
AQ-8	The facility shall not emit particulate emissions from any single source which exceed an opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor. (District General ATC Permit Condition b).	As part of the semiannual Air Quality Reports (as required by AQ-43), the project owner shall include an explanation and the date, time, and duration of any violation of this Condition.
AQ-9	The facility shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions. When the source involves a combustion process, the concentration must be calculated to 12 per cent carbon dioxide (CO 2). (District General ATC Permit Condition c).	As part of the annual Air Quality Reports, the project owner shall submit to the District and CPM the annual source test and specify the level of particulate matter in grains per cubic foot of gas at standard conditions.
AQ-10	The facility shall not discharge in any one hour from any source whatsoever fumes in total quantities in excess of the amounts as prescribed for and shown in District's Rule 3.3 Table of Allowable Rate of Emission Based on Process Weight Rate. (District General ATC Permit Condition d).	As part of the semiannual Air Quality Reports (as required by AQ-43), the project owner shall indicate the date, time, and duration of any violation of this Condition.
AQ-11	The facility shall not discharge into the atmosphere, from any single source of emission whatsoever, any sulfur oxides in excess of 0.2 percent by volume (2,000 ppm) collectively calculated as sulfur dioxide (SO 2). (District General ATC Permit Condition e).	As part of the annual Air Quality Reports, the project owner shall submit to the District and CPM the annual source test and specify the level of sulfur oxides in percent by volume of gas at standard conditions.
AQ-12	Project owner shall not build, erect, install, or use any article, machine, equipment or other contrivance to conceal an emission which would otherwise constitute a violation of the Health and Safety Code of the State of California or of these Rules and Regulations. (FRAQMD General ATC Permit Condition f).	Refer to AQ-34 through AQ-36. The project owner shall obtain approval from the District and the CPM prior to installing any new equipment that results in releasing air contaminants.
AQ-13	Project owner shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to: use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, construction of roadways, or the clearing of land; application of asphalt, oil, water, or suitable chemical on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts; other means approved by the Air Pollution Control Officer. (FRAQMD General ATC Permit Condition g).	Refer to conditions AQ-1 through AQ-6.

AQ-14	In the case of shut-down or re-start of air pollution equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Air Pollution Control Officer at least twenty-four (24) hours prior to the planned shutdown. Such prior notice may include, but is not limited to, the following: a. Identification of the specific equipment to be taken out of service as well as its location and permit number; b. The expected length of time that the air pollution control equipment will be out of service; c. The nature and quantity of emissions of air contaminants likely to occur during the shut-down period; d. Measures such as the use of off-shift labor and equipment that will be taken to minimize e. The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period. (FRAQMD General ATC Permit Condition h).	As part of the semiannual Air Quality Report (as required by AQ-43), the project owner shall include the dates of the equipment maintenance schedule including when each piece of equipment will be shut-down and when it will start-up.
AQ-15	In the event that any emission source, air pollution control equipment, or related facility breaks down in such a manner which may cause the emission of air contaminants in violation of any permit condition or applicable rules or regulations, other than as exempted herein, the licensee shall immediately notify the Air Pollution Control Officer of such failure or breakdown and subsequently provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. The Air Pollution Control Officer shall be notified when the condition causing the failure or breakdown has been corrected and the equipment is again in operation. (FRAQMD General ATC Permit Condition i).	As part of the semiannual Air Quality Report (as required by AQ-43), the project owner shall include the date and duration of all equipment breakdowns, the cause of the breakdown, how it was corrected, and the measures that will be used to prevent the problem from occurring again.
AQ-16	Project owner shall submit an application for a Federal Operating Permit Title-V within 12 months after operational startup. (FRAQMD General ATC Permit Condition j).	The project owner shall submit to the CPM a copy of the report at the time of filing with the District.
AQ-17	Project owner shall prepare and submit to the District a Toxic Hot Spots emission inventory by the first month of August following the first full calendar year of facility operational history. (FRAQMD General ATC Permit Condition k).	As part of the semiannual Air Quality Report (as required by AQ-43), the project owner shall submit to the District and the CPM an inventory of all Toxic Hot Spots emissions.
AQ18	PSD permit must be obtained from the USEPA before commencement of facility operations. (FRAQMD General ATC Permit Condition L).	At least 90 days prior to commencement of facility operations, the project owner shall submit to the CPM a copy of the PSD permit from the US EPA.
AQ-19	The equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A (General Provisions), Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Systems), and GG (Standards of Performance for Stationary Gas Turbines), Compliance with all applicable provisions of these regulations is required. (FRAQMD General ATC Permit Condition m).	As part of the first semi-annual Air Quality Report, the project owner shall submit to the District and CPM a copy of a statement of compliance with the above federal applicable provisions and regulations.
AQ-20	AQ-20 Project owner shall meet the provisions of the Federal Acid Rain Program Title-IV by filing an Acid Rain permit 24 months before operational startup and by certifying EMS or NOx and O 2 within 90 days.	The project owner shall provide the District and the CPM with a copy of the Acid Rain permit within 90 days after the permit is approved. Refer to AQ-33 for verification.
AQ-21	Project owner shall file an RMP with the Sutter County office in charge of the prevention of accidental releases prior to operational startup. (FRAQM General ATC Permit Condition o).	Refer to Hazardous Materials condition and verification HazMat-2.
AQ-22	The Authority To Construct (ATC) is not transferable from one location to another, or from one person to another without the written approval of the APCO. (FRAQMD General ATC Permit Condition p).	At least sixty days in advance, the project owner shall notify, in writing, the District and the CPM of any intended transfer of ownership or location and obtain written approval prior to any transfer.
AQ-23	District personnel shall be allowed access to the plant site and pertinent records at all reasonable times for the purposes of inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emission records and otherwise conducting all necessary functions related to this permit. (FRAQMD General ATC Permit Condition q).	During site inspection, the project owner/operator shall make the plant logs available to the District, California Air Resources Board (CARB), and Commission staff.
AQ-24	Project owner shall maintain a copy of all District permits at the facility. (FRAQMD General ATC Permit Condition r).	During site inspection, the project owner/operator shall make all plant permits available to the District, California Air Resources Board (CARB), and Commission staff.

AQ-25	Combustion turbine exhaust stacks shall exhaust at a height of 145 feet and the maximum diameter shall not exceed 18 feet. (FRAQMD General ATC Permit Condition s).	The project owner/operator shall make the site available for inspection to the District, California Air Resources Board (CARB), and Commission staff.
AQ-26	Project owner shall submit to the District and the Energy Commission ERC option contracts or final signed contracts for the project's ERC liability, except for PM10, as listed in condition AQ-42 prior to the Energy Commission's Final Decision on the project. (FRAQMD General ATC Permit Condition t).	At least 10 days prior to the Commission adoption of the final decision on the project, the Project owner shall have provided copies of all option contracts or signed contracts required by this Condition.
AQ-27	This condition has been deleted.	
AQ-28	Calpine has produced evidence indicating that it has an enforceable right to ERCs located in another District. These ERCs cannot be used until the District Board adopts an approving resolution and enters into an MOU with the other District. The District intends to act on the resolution and MOU as soon as practicable after CEC completes an environmental analysis document and the criteria in Section 15253, Subdivision (b) of the CEQA Guidelines are met. (FRAQMD General ATC Permit Condition v).	At least 30 days prior to the start of construction, Project owner shall provide a copy of the signed MOU to the CPM.
AQ-29	Project owner may substitute interpollutant offsets of VOCs (ROCs) for NOx at a 2.0 to 1.0 interpollutant offset ratio pursuant to Rule 10.1, Section E.2, d. (FRAQMD General ATC Permit Condition w).	The project owner shall submit to the District and the CPM a copy of the offsets calculations that satisfy AQ-42 if it chooses to use the interpollutant substitution offset ratio specified in this Condition.
AQ-30	The facility shall exclusively use California PUC pipeline quality natural gas as fuel. The fuel gas total sulfur and heat content will be determined and reported to the District by collecting and analyzing a sample on a monthly basis or by providing monthly certification of the natural gas total sulfur and/or heat content issued by the natural gas distributor. (FRAQMD General ATC Permit Condition x).	As part of the semi-annual Air Quality Report (as required by AQ-43), the project owner shall submit to the District and CPM a copy of the natural gas analysis or certification issued by the natural gas distributor to satisfy this Condition.
AQ-31	All basic and control equipment is to be operated and maintained in accordance with vendors' recommended practices and procedures. (FRAQMD General ATC Permit Condition y).	Refer to AQ-14 verification.
AQ-32	The maximum heat input allowed to each permitted internal and external combustion emissions unit, expressed in MMBtu units on a High Heating Value basis (HHV), shall not exceed the limits indicated in the table below: (FRAQMD specific ATC Permit Condition a). Emission Unit / MMBtu/hour / MMBtu/day(1) / MMBtu/year (2) CTG-1 / 1,900 / 45,600 / 16,644,000 CTG-2 / 1,900 / 45,600 / 16,644,000 Duct Burners-1 / 170 / 4,080 / 928,200 Duct Burners-2 / 170 / 4,080 / 928,200 (1) Based on 24 hour-day (2) Based on 365 days/year	As part of the semi-annual Air Quality Reports (as required by AQ-43), the project owner shall document the date and time when the hourly fuel consumption exceeds the hourly limits included in this Condition. The reports shall include a summary of hourly and daily fuel consumption in MMBtu [high heating value (HHV)] for all the cases indicated in the table above. The January Air Quality Report shall also include information on the amount of fuel consumed, in MMBtu (HHV), in the prior calendar year.

AQ-33	The following definitions and limitations shall apply: (FRAQMD specific ATC Permit Condition b). (1) Startups are defined as the time period commencing with the introduction of fuel flow to the gas turbine and ending when the NOx concentrations do not exceed 2.5 ppmvd at 15% O2 averaged over 1-hour. (2) Cold Startups are those that occur after the CTG has not been in operation for more than 72 hours. (3) For each CTG, the Cold Startup shall not exceed 180 consecutive minutes. (4) Hot Startups are startups that are not Cold Startups. (5) The maximum allowable NOx emissions for Hot and Cold Startups from each CTG shall not exceed 519 lb/day. (6) For each CTG, the Hot Startup shall not exceed 60 consecutive minutes. (7) Shutdowns are defined as the time period commencing with a 15 minute period during which the 15 minute average NOx concentrations exceed 2.5 ppmvd at 15% O2 and ending when the fuel flow to the gas turbine is discontinued. (8) For each CTG, the Shutdown shall not exceed 60 consecutive minutes (9) The maximum duration of Cold Startups per CTG shall be 150 hours per year and 39 hours per calendar quarter. (10) The maximum duration of Hot Startups per CTG shall be 250 hours per year, and 63 hours per calendar quarter. (11) The maximum duration of Shutdowns per CTG shall be 300 hours per year, and 76 hours per calendar quarter. (12) Compliance with the above yearly limits shall be calculated based on a rolling 12 month average. (13) All emissions during startups and shutdowns shall be included in all calculations of daily and annual mass emissions required by this permit. (14) For each CTG the maximum number of Duct Burner hours of operation shall not exceed 5,460 per calendar year. (15) For each CTG the maximum number of Power Augmentation Steam Injection hours shall not exceed 2,000 per calendar year. (16) For each CTG the maximum hourly emission rates (lbs/hr) (for a cold startup not to exceed 120 minutes of uncontrolled emissions) are given in the table below averaged over any rolling three hour period, except for the NOx emission rate, which will be averaged over one hour period: [see AQ-33 (16) on page 42] (17) For maximum project daily emissions (lbs./day) are given in the table below: [see Table AQ-33 (17) on page 42] (18) The maximum quarterly emissions for the facility are given in the table below: [see Table AQ-33 (17) on page 42] (19) The maximum annual calendar year emissions (tons/year) for the facility are given in the table below: [see Table AQ-33 (19) on page 42]	As part of the semi-annual Air Quality Report (as required by AQ-43), the project owner shall provide all data required in this Condition. In the semi-annual Air Quality Reports (as required by AQ-43), the project owner shall indicate the date, time, and duration of any violation to the NO x, and VOC limits presented in this Condition. The project owner shall include in the semi-annual Air Quality Reports (as required by AQ-43) daily and annual emissions as required in this Condition.
AQ-34	The BACT emission limits (including duct burner emissions) specified in Conditions (a), (b), (c), (d), and (e) apply under all operating load rates except during CTG startups and shutdowns, as defined in Condition AQ-33. (FRAQMD specific ATC Permit Condition c). (a) NOx emission concentrations shall be limited to 2.5 ppmvd @ 15% O2 on a 1 hour rolling average (based on readings taken at 15 minute intervals) and with a maximum of 10 ppmvd ammonia slip. (b) CO emission concentrations shall be limited to 4.0 ppmvd @ 15% O2, on a calendar day average. (c) VOC emission concentrations shall be limited to 1 ppmvd @ 15% O2, on a calendar day average. (d) PM10 emissions shall be limited to 11.5 pounds per hour, on a calendar day average. (e) SO2 emission concentrations shall be limited to 1 ppmvd @ 15% O2, on a calendar day average.	At least sixty (60) days before conducting a source test, the project owner shall submit to the District and the CPM for their review, a detailed performance annual source test procedure designed to satisfy the requirements of this Condition. The project owner shall incorporate the District's and Commission's comments on or modifications to the procedure if any are received. The project owner shall also notify the District and the CPM within seven (7) working days before the project begins initial operation and/or plans to conduct source tests as required by this Condition. All source test results shall be submitted to the CPM and District within 30 days of the date of the tests.

AQ-35	Each CTG set exhaust vent stack shall be equipped with NOx and % oxygen (O2) CEMs in order to analyze and record exhaust gas flow rate and concentrations. CO, PM10, SO2, and VOC emissions shall be monitored by the CEMs, using source test derived algorithms as indicated in AQ-36 below. In the event that test results show that CO emission limits are exceeded, the APCO may require CEMs for recording concentrations of CO. (a) The NOx CEMs shall have the capability of recording NOx concentrations during all operating conditions, including startups and shutdowns. **(b)** Relative accuracy testing shall be performed on the CEMs on a semi-annual basis or as required by the Acid Rain permit provisions in Title 40, CFR, Part 75, Appendix B. (FRAQMD specific ATC Permit Condition d).	At least one hundred and twenty (120) days before initial operation, the project owner shall submit to the District and the CPM a continuous emissions monitoring procedure. Within sixty (60) days of receipt of the procedure, the District and the CPM will advise the project owner of the acceptability of the procedure. Based on the results of the source test identified in AQ-36, the District and CPM may require CEMs for recording concentrations of CO.
AQ-36	Within ninety days after the start of commercial operation of the SPP, source testing shall be performed to determine the mass emission rates and concentrations of NOx, CO, VOC, and SO2 emissions at four different steady-state CTG load rates over the expected operating range of either combustion turbine, as required by 40 CFR 60.335.c (2). The source testing will be used to determine compliance with the permitted emission limits indicated in Specific ATC Permit Conditions AQ-33 and AQ-34. Source testing shall be conducted to determine PM10 mass emissions and concentrations while the CTG is operating at 100 percent load with and without the duct burners, firing at the maximum rated capacity or 170 MMBtu/hr (HHV), whichever is greater. (a) The source testing results shall be used to develop predictive emission algorithms to estimate mass emission rates for CO, VOC, and SO2, and PM10 emissions. (b) Source testing to determine the mass emission rates and concentrations of NOx shall be conducted annually after the initial source test indicated in a) above. **(c)** Source testing to determine the mass emission rates and concentrations of CO, VOC, SO2 and PM10 shall be conducted annually. The Air Pollution Control Officer may waive annual source testing requirements if prior test results indicate an adequate compliance margin has been maintained. (FRAQMD specific ATC Permit Condition e).	At least sixty (60) days before the start of commercial operation of the project, the project owner shall submit to the District and the CPM for review a detailed performance test procedure necessary to comply with this Condition. The project owner shall incorporate the District and CPM's comments on or modifications to the procedure. At least sixty (60) days prior to any subsequent annual compliance source tests, the project owner shall submit to the District and the CPM for review any proposed changes to the original source test procedure. The project owner shall incorporate the District's and CPM's comments on or modifications to the annual source test procedure. The project owner shall also notify the District and the CPM within seven (7) working days before the project begins initial operation and/or plans to conduct source testing as required by this Condition. Source test results shall be submitted to the District and the CPM within 30 days of the date of the tests.
AQ-37	Source tests to determine ammonia slip shall be conducted within ninety days after commercial operation of the SPP and thereafter as required by the APCO. (FRAQMD specific ATC Permit Condition f).	Please refer to AQ-36 verification.
AQ-38	Verification: The maximum allowable ammonia injection rate to each of the SCR systems shall be 25 pounds per hour under normal operating condition. This injection rate may be adjusted based on source tests results. (FRAQMD specific ATC Permit Condition g).	Please refer to AQ-34 verification.
AQ-39	Verification: Within ninety days after beginning commercial operation of the SPP, cold startup, hot startup, and shutdown source tests shall be conducted to determine the emissions of CO and NOx. The APCO may approve the use of the NOx CEMS readings in lieu of source testing if annual Relative Accuracy Testing Audits (RATA) testing is provided. (FRAQMD specific ATC Permit Condition h).	Within ninety days after the start of commercial operation of the project, the project owner shall submit to the District and the CPM for review a detailed performance source test procedure designed to satisfy the requirements of this Condition. The project owner shall incorporate the District's and Commission's comments on or modifications to the procedure. The project owner shall also notify the District and the CPM within seven (7) working days before the project begins commercial operation and/or plans to conduct source test as required by this Condition. Source test results shall be submitted to the District within 30 days of the date of the tests.
AQ-40	Records and logs of all data generated by CEMS and algorithms shall be maintained for a period of five (5) years. (FRAQMD specific ATC Permit Condition i).	During site inspection, the project owner shall make all data generated by the CEMS and algorithm, and included in the plant logs for a period of five years, available to the District, California Air Resources Board (CARB), and the Commission staff.

AQ-41	The project owner shall provide calendar quarterly reports to the District in a format determined in consultation with the District. The calendar quarterly reports shall include the following: CEMS and predictive algorithm emissions data; CTG and duct burner fuel use and operating hours; power augmentation steam injection rates and hours of operation; ammonia injection rates; emission control systems and CEMS hours of operation including the time, date, duration, and reason for any malfunctions of these systems; the number of hot startups, cold startups, and shutdowns; and the electrical and steam production rates. These data shall be averaged on a daily basis, except where required to demonstrate compliance with an emission limitation. (FRAQMD specific ATC Permit Condition j).	Within 30 days of the end of the calendar quarter, the project owner shall provide to the District and CPM the data required in this Condition.
AQ-42	Prior to the start of construction, the SPP facility must provide ERC certificates for NOx, ROC, and PM10, as indicated in the table below [see page 42]. The ERC sources are Atlantic Oil Company, Ranch A, Ranch B, Ranch C, Ranch D, Ranch E, Spreckles Sugar Company, Tri Union, and Rosboro Lumber. Alternative sources of offsets may be used if they meet the criteria applied to these sources and are approved by the District and CPM. (FRAQMD specific ATC Permit Condition k).	At least 30 days prior to the start of construction, the project owner must submit a copy of the required ERC certificates to the CPM and the District.
AQ-43	The project owner must file a semi-annual air quality report with the CPM documenting the information required by these conditions and verifications.	The semi-annual Air Quality report (as required by AQ-43) must be submitted to the CPM within 30 days of the end of the 6 month reporting period.
AQ-44	The project owner must remeasure traffic on roads used to determine PM10 mitigation at a time of year which avoids traffic volumes associated with annual rice harvest activities. Results of the remeasurement shall be reported to the CPM and the APCO for their joint determination of whether PM10 mitigation measures must be modified as a result of the additional traffic measurements.	Within 90 days of certification the project owner shall consult with the CPM and APCO on mutually agreeable time(s) of year to take the additional traffic measurements.
	PUBLIC HEALTH	
PH-1	Unless a screening health risk assessment performed by the project owner pursuant to CAPCOA Guidelines shows that health risks to the public are not significant, the project owner will require its contractor(s) to construct natural gas dehydrators using a design which vent emissions from glycol regeneration tanks through packed-chilled condensers to minimize hazardous air emissions.	Prior to construction of the dehydrators, the project owner will provide the CPM with copies of the Authority to Construct for the dehydrators from the Colusa County Air Pollution Control District and the Feather River Air Quality Management District.
	LAND USE	
LAND USE-1	Calpine's Planned Development (PD) site plan shall include agricultural buffers that comply with the Sutter County buffer design and maintenance guidelines to minimize conflicts between the industrial nature of the site and adjacent agricultural use. Calpine's PD site plan shall be submitted to the satisfaction of the Sutter County Board of Supervisors.	At least 30 days prior to the start of construction, the project owner shall submit to the Energy Commission Compliance Project Manager (CPM) a copy of the adopted PD site plan.
LAND USE-2	Development and use of the property shall be limited as set forth in the Planned Development Plan adopted by the Sutter County Board of Supervisors. Additionally, that portion of the site which is part of the Sutter Power Project (SPP) and its ancillary facilities shall be used in conformance with the certification issued by the Energy Commission. Only that portion of the site which is part of the SPP and its ancillary facilities shall be under the authority and jurisdiction of the Energy Commission. Sutter County will maintain authority and jurisdiction on the remainder of the site. Any development, land improvement, building construction or use of the land (including that pertaining solely to existing Greenleaf 1) which is not in conformity with the adopted Planned Development Plan shall be subject to subsequent approval of a planned development amendment and environmental review by Sutter County. Any development, land improvement, building construction or use of the land which is not in conformity with the adopted Planned Development Plan and which relates to the SPP or its ancillary facilities, shall be reported to the CPM to determine whether a certification amendment is necessary.	At least 30 days prior to the start of construction, the project owner shall submit to the CPM a copy of the adopted PD site plan.
LAND USE-3	Calpine shall ensure compliance with all applicable criteria of Colusa County's use permit for the dehydrator and that portion of the pipeline within Colusa County. In addition, Calpine shall ensure compliance with all applicable criteria of Colusa County's grading permit criteria (Colusa County Code Chapter 9, Ordinance No. 414 - Land Grading and Leveling). Calpine shall provide a letter from the Colusa County Planning Director stating that all applicable criteria have been satisfactorily met.	At least 30 days prior to the start of construction of the natural gas pipeline, the project owner shall submit to the CPM a copy of the letter from Colusa County stating that all applicable criteria have been met to the satisfaction of the Colusa County Planning Director.

LAND USE-4	Calpine shall pave a new runway to allow for year round use by members of the local agricultural industry. The location of the new runway shall be to the satisfaction of the Sutter County Board of Supervisors.	At least 30 days prior to the start of construction of the runway, the project owner shall submit to the CPM a copy of a letter from the Sutter County Board of Supervisors stating that the location of the new runway, timing of onstruction, and method of paving have been agreed upon to the satisfaction of the Sutter County Board of Supervisors.
LAND USE-5	Where indicated by safety concerns, the transmission line shall have a minimum clearance of 42 feet from the ground to the conductor at maximum sag and the transmission line shall be designed to satisfy the safety concerns of Sutter Extension Water District and Sutter County (on behalf of aerial applicator safety, and public safety), including any applicable provisions of Article 86, State of California High Voltage electrical Safety Order, section 2946.	At least 30 days prior to the start of construction the project owner shall submit to the Compliance Project Manager a copy of a letter from the Sutter County Board of Supervisors stating that the Board of Supervisors has conferred with Calpine and the Sutter Extension Water District to agree on any measures necessary to ensure compliance of the transmission line with the applicable provision of Article 86, State of California High Voltage Electrical Safety Orders, Section 2946.
LAND USE-6	Calpine, or any successive landowner, shall grant to Sutter County the development rights and an open area easement on the portion of the subject property that is not identified for development on the proposed development plan reviewed by the Board of Supervisors. The grant shall preclude Calpine and future owners of the land from expanding the facility beyond the 16 +/- acre area of the footprint and its related facilities (e.g. drainage facilities, evaporation ponds) approved as part of this request, unless the agreement is rescinded by a resolution adopted by the Board of Supervisors. The grant and easement shall run with the land and be recorded to give future property owners notice of its existence.	Prior to any site preparation work and prior to the issuance of a building permit for any construction on the project site, the project owner shall execute a conveyance of development rights and perpetual open area easement to the county of Sutter. A copy of the recorded agreement shall be provided to the CPM at least 30 days prior to the initiation of any earth moving activities.
LAND USE-7	The project owner shall place underground the existing 12 kV PG&E line which runs parallel to O'Banion Road from the South Township Road to the east levee of the Sutter Bypass. Encroachment permits shall be obtained from the Sutter County Public Works Department for any construction work done in the County right-of-way.	Prior to placing underground the 12 kV PG&E line, the project owner shall provide to the CPM a copy of the Encroachment permit issued by the County Public Works Department. Prior to construction of the 230 kV line from the plant site to the switching station, the project owner shall submit to the CPM verification in the form of a letter that the 12 kV PG&E line has been placed underground.
	SOCIOECONOMICS	
SOCIO-1	The project owner and its contractors and subcontractors shall recruit employees and procure materials and supplies within Sutter County first unless: ▪ to do so will violate federal and/or state statutes; ▪ the materials and/or supplies are not available; or ▪ qualified employees for specific jobs or positions are not available; or ▪ there is a reasonable basis to hire someone for a specific position from outside the local area.	At least 30 days prior to the start of construction, the project owner shall submit to the California Energy Commission (CEC) Compliance Project Manager (CPM) copies of contractor, subcontractor, and vendor solicitations and guidelines stating hiring and procurement requirements and procedures. In addition, the project owner shall notify the CEC CPM in each Monthly Compliance Report of the reasons for any planned procurement of materials or hiring outside the local regional area that will occur during the next two months. The CEC CPM shall review and comment on the submittal as needed.
SOCIO-2	The project owner shall provide a letter to the CEC CPM outlining the agreement between the project owner and Sutter County on the amount of fees and timing of payments the project owner will provide to cover project-specific impacts associated with hazardous materials handling and fire protection.	At least 30 days prior to the start of construction, the project owner shall submit to the CPM a copy of the agreement with the Sutter County Fire Department which states the amount of fees and timing of payment the project owner will provide to cover project-specific impacts associated with hazardous materials handling and fire protection.

VISUAL RESOURCES		
VIS-1	Prior to first electricity generation, the project owner shall treat the project structures, buildings, and tanks visible to the public in non-reflective colors to blend with the agricultural setting. ***Protocol:*** The project owner shall submit a treatment plan for the project to the California Energy Commission Compliance Project Manager (CPM) for review and approval. The treatment plan shall include: ▪ specification, and 11" x 17" color simulations, of the treatment proposed for use on project structures, including structures treated during manufacture; ▪ a detailed schedule for completion of the treatment; and, ▪ a procedure to ensure proper treatment maintenance for the life of the project. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall submit to the CPM a revised plan. After approval of the plan by the CPM, the project owner shall implement the plan according to the schedule and shall ensure that the treatment is properly maintained for the life of the project. For any structures that are treated during manufacture, the project owner shall not specify the treatment of such structures to the vendors until the project owner receives notification of approval of the treatment plan by the CPM. The project owner shall not perform the final treatment on any structures until the project owner receives notification of approval of the treatment plan from the CPM. The project owner shall notify the CPM within one week after all precolored structures have been erected and all structures to be treated in the field have been treated and the structures are ready for inspection.	Not later than 60 days prior to ordering any structures that are to be color treated during manufacture, the project owner shall submit its proposed plan to the CPM for review and approval. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall submit to the CPM a revised plan. Not less than thirty days prior to first electricity generation, the project owner shall notify the CPM that all structures treated during manufacture and all structures treated in the field are ready for inspection. The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report..
VIS-2	Any fencing for the project shall be non-reflective. ***Protocol:*** At least 30 days prior to ordering the fencing the project owner shall submit to the CPM for review and approval the specifications for the fencing documenting that such fencing will be non-reflective. If the CPM notifies the project owner that revisions of the specifications are needed before the CPM will approve the submittal, the project owner shall submit to the CPM revised specifications. The project owner shall not order the fencing until the project owner receives approval of the fencing submittal from the CPM. The project owner shall notify the CPM within one week after the fencing has been installed and is ready for inspection.	At least 60 days prior to ordering the non-reflective fencing, the project owner shall submit the specifications to the CPM for review and approval. If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, within 30 days of receiving that notification, the project owner shall prepare and submit to the CPM a revised submittal. The project owner shall notify the CPM within seven days after completing installation of the fencing that the fencing is ready for inspection
VIS-3	Prior to first electricity generation, the project owner shall design and install all lighting such that light bulbs and reflectors are not visible from public viewing areas and illumination of the vicinity and the nighttime sky is minimized. To meet these requirements: ***Protocol:*** The project owner shall develop and submit a lighting plan for the project to the CPM and the Sutter County Community Services Department for review and approval. The lighting plan shall require that: ▪ Lighting is designed so that exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of this outdoor lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary; ▪ High illumination areas not occupied on a continuous basis such as maintenance platforms or the main entrance are provided with switches or motion detectors to light the area only when occupied; ▪ A lighting complaint resolution form (similar in general format to that in Visual Attachment 1, which follows these Conditions) will be used by plant operations, to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan. Lighting shall not be installed before the plan is approved. The project owner shall notify the CPM when the lighting has been installed and is ready for inspection.	At least 60 days before ordering the exterior lighting, the project owner shall provide the lighting plan to the CPM and to the Sutter County Community Services Department for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan. The project owner shall notify the CPM within seven days of completing exterior lighting installation that the lighting is ready for inspection

VIS-4	By December 1 of the year in which ground disturbance related to construction of the power plant begins, the project owner shall implement a landscape plan that meets the requirements of the Sutter County Zoning Code and provides a continuous screen of the proposed power plant from sensitive view areas. The screen shall be created along the northern and southern boundaries of the Calpine property and along the eastern boundary of the Calpine property parallel to South Township Road. Protocol: The project owner shall submit to the CEC CPM for review and approval a specific plan describing its landscaping proposal, stating that it conforms to Sutter County's Zoning Code and has been approved by the County. The plan shall include, but not be limited to: ▪ a detailed landscape plan, at a reasonable scale, which includes a list of proposed tree and shrub species and sizes and a discussion of the suitability of the plants for the site conditions and mitigation objectives. One objective shall be to provide year-round screening. To meet this objective evergreen species shall be used. This may require a berm to raise the tree roots above the water table. Another objective shall be to provide screening at least 75 feet tall for the total distance to be screened, except where clearance beneath the proposed transmission line requires shorter trees. Another objective shall be to use species that grow rapidly. The plan shall propose species and spacing to achieve these objectives. Trees to be planted shall be the optimal size to reach full height as rapidly as possible. ▪ maintenance procedures, including any needed irrigation; and ▪ a procedure for replacing unsuccessful plantings If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan. The trees and shrubs shall not be planted before the plan is approved. The project owner shall notify the CPM when the trees and shrubs have been planted and are ready for inspection.	At least 90 days prior to the start of commercial operation of the project, the project owner shall submit the proposed landscape plan for the project to the CPM for review and approval. The CPM will respond to the project owner within 15 days of receipt of the landscaping plan. The project owner shall submit any required revisions within 30 days of notification by the CPM. The CPM will respond to the project owner within 15 days of receipt of the revised documents. The project owner shall notify the CPM within seven days after completing the proposed planting that the planting is ready for inspection.
VIS-5	Prior to first electricity generation at the Sutter Power Project, to reduce the contribution of the Sutter Power Project to cumulative visual impacts, the project owner shall have the Greenleaf 1 facilities painted to match the colors of the Sutter Power Project. ***Protocol:*** The project owner shall submit a treatment plan for the project to the California Energy Commission Compliance Project Manager (CPM) for review and approval. The treatment plan shall include: ▪ specification, and 11" x 17" color simulations, of the treatment proposed for use on project structures. ▪ a detailed schedule for completion of the treatment; and, ▪ a procedure to ensure proper treatment maintenance for the life of the project. f the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall submit to the CPM a revised plan. After approval of the plan by the CPM, the project owner shall implement the plan according to the schedule and shall ensure that the treatment is properly maintained for the life of the project. The project owner shall not perform the final treatment on any structures until the project owner receives notification of approval of the treatment plan from the CPM. The project owner shall notify the CPM within one week after all structures have been treated and the structures are ready for inspection.	At least 60 days prior to first commercial electricity generation at the Sutter Power Project, the project owner shall submit its proposed plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification, the project owner shall submit to the CPM a revised plan. The project owner shall notify the CPM when all structures have been treated and are ready for inspection. The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

VIS-6	Prior to first electricity generation, to offset the contribution of the Sutter Power Project to cumulative lighting impacts, the project owner shall have the lighting at the Greenleaf 1 Power Plant modified such that light bulbs and reflectors are not visible from public viewing areas and illumination of the vicinity and the nighttime sky is minimized. To meet these requirements: ***Protocol:*** The project owner shall develop and submit a lighting modification plan for the project to the CPM for review and approval. The lighting plan shall require that: • Exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and backscatter to the nighttime sky is minimized. The luminescence or light source shall be shielded to prevent light trespass outside the project boundary; • High illumination areas not occupied on a continuous basis such as maintenance platforms or the main entrance shall be provided with switches or motion detectors to light the area only when occupied; • A lighting complaint resolution form (following the general format of that in attachment 1) will be used by plant operations, to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file. If the CPM notifies the project owner that revisions of the plan are needed before the CPM will approve the plan, the project owner shall prepare and submit to the CPM a revised plan. Lighting modifications shall not be made before the plan is approved. The project owner shall notify the CPM when the lighting modifications have been made and are ready for inspection.	At least 60 days prior to first electricity generation on the Sutter Power Project the project owner shall provide the lighting modification plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan. The project owner shall notify the CPM within seven days after completing exterior lighting modifications that the lighting is ready for inspection.
VIS-7	To minimize potential visual impacts, the project owner shall place all electrical transmission poles so as to not be directly in front of any residence and, to the extent possible, so as to not be directly in the view of the Sutter Buttes from any residence. ***Protocol:*** At least 60 days prior to construction of the transmission line, the project owner shall submit a plan to the CPM showing: • all proposed pole locations; • all residences within one-quarter mile of the proposed transmission line route that have a view of the transmission line; and • the line of sight from each of the residences toward the Sutter Buttes. If the CPM notifies the project owner that re submit to the CPM a revised plan. Transmission line pole placement shall not begin before the plan is approved. The project owner shall notify the CPM when the poles have been installed and are ready for inspection.	At least 60 days prior to beginning transmission line construction, the project owner shall provide the electrical transmission pole plan to the CPM for review and approval. If the CPM notifies the project owner that any revisions of the plan are needed before the CPM will approve the plan, within 30 days of receiving that notification the project owner shall submit to the CPM a revised plan. The project owner shall notify the CPM within seven days after completing transmission line construction that the line is ready for inspection.
	BIOLOGICAL RESOURCES	
BIO-1	Construction-site and/or ancillary facilities preparation (described as any ground disturbing activity other than allowed geotechnical work) shall not begin until an Energy Commission Compliance Project Manager (CPM) approved designated biologist is available on site. ***Protocol:*** The designated biologist must meet the following minimum qualifications: 1) a bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field; 2) three years of experience in field biology or current certification of a nationally recognized biological society, such as the Ecological Society of America or The Wildlife Society; 3) one year of field experience with resources found in or near the project area; and 4) ability to demonstrate to the satisfaction of the CPM the appropriate education and experience for the biological resource tasks that must be addressed during project construction and operation. If, within 30 days of receiving the proposed designation, the CPM determines that the proposed designated biologist is unacceptable, the project owner shall submit another individual's name and qualifications for consideration. If the approved designated biologist needs to be replaced, the project owner shall obtain approval of a new designated biologist by submitting to the CPM the name, qualifications, address, and telephone number of the proposed replacement. No disturbance will be allowed in any designated sensitive area(s) until the CPM approves a new designated biologist and that designated biologist is on-site.	At least 30 days prior to the start of rough grading, the project owner shall submit to the CPM for approval, the name, qualifications, address, and telephone number of the individual selected by the project owner as the designated biologist. If a designated biologist is replaced the information on the proposed replacement as specified in the Condition must be submitted in writing at least ten working days prior to the termination or release of the preceding designated biologist.

BIO-2	The CPM approved designated biologist 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; and 3) notify the project owner and the CPM of any non-compliance with any Condition.	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-3	The project owner's supervising construction and operating engineer shall act on the advice of the designated biologist to ensure conformance with the biological resource Conditions of Certification. ***Protocol:*** The project owner's supervising construction and operating engineer shall halt, if needed, all construction activities in areas specifically identified by the designated biologist as sensitive to assure that potential significant biological resource impacts are avoided. The designated biologist shall: 1) tell the project owner and the supervising construction and operating engineer when to resume construction; and 2) advise the CPM if any corrective actions are needed or have been instituted.	Within two working days of a designated biologist's notification of non-compliance with a Biological Resources Condition or a halt of construction, the project owner shall notify the CPM by telephone of the circumstances and actions being taken to resolve the problem or the non-compliance with a Condition. For any necessary corrective action taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner will be notified by the CPM that coordination with other agencies will require additional time before a determination can be made.
BIO-4	The project owner shall develop and implement a Worker Environmental Awareness Program in which each of its own employees, 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, are informed about biological resource sensitivities associated with the project (see General Conditions of Compliance). ***Protocol:*** 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; 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 be administered by 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.	At least 30 days prior to the start of rough grading, the project owner shall provide copies of the Worker Environmental Awareness Program and all supporting written materials prepared by the designated biologist and the name and qualifications of the person(s) administering the program to the CPM for approval. 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	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.	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-6	Prior to construction, the project owner shall provide final copies of the Biological Opinions per Section 7 of the federal endangered species act obtained from the U.S. Fish and Wildlife Service (USFWS) and incorporate the terms of the agreement into the Biological Resources Mitigation Implementation and Monitoring Plan.	At least 60 days prior to the start of rough grading, the project owner shall submit to the project CPM copies of the final USFWS Biological Opinion.

BIO-7	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.	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 Alternation Agreement or written verification that this permit is not necessary for this project.
BIO-8	The project owner shall ensure the following measures are implemented to avoid or mitigate project impacts to giant garter snakes: 1) Avoid trenching or auguring activities within 200 feet of giant garter snake habitat from October 2 through April 30. 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. 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. 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.	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 or have been accomplished by the licensee and specifying the procedures used or that will be used to implement these measures.
BIO-9	The project owner shall ensure the following measures are implemented to mitigate or avoid project impacts to Swainson's hawks: 1) The designated biologist shall conduct preconstruction surveys during March through June during construction years to determine if an active nest site is within 0.5 mile of construction activities. 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.	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.

BIO-10	The project owner shall ensure the following measures are implemented to mitigate or avoid project impacts to migratory birds: 1) Powerlines shall be constructed following recommendations in Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996 (Avian Powerline Interaction Committee 1996). 2) Powerlines located in sensitive areas (e.g. over Gilsizer Slough and through potential foraging or flyway areas) shall be fitted with bird flight diverters placed on the ground wire at 16.4-foot (5-meter) intervals. Sensitive areas shall be identified in the Biological Resources Mitigation Implementation and Monitoring Plan (Condition BIO-12). 3) Between October through March, measures shall be taken in areas of high migratory bird use (such as Gilsizer Slough) to flush birds from the construction area prior to stringing wires. 4) Develop a monitoring plan to analyze whether the transmission line and HRSG stacks are causing significant impacts from avian collision and/or electrocutions. If it is determined that significant impacts are occurring, 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 10 years following the completion of construction. If it can be shown that impacts to birds from the project are not occurring, licensee has the option to request staff to decrease the frequency or cease monitoring. 5) Underbuild distribution lines whenever possible. Underbuilt lines should be spaced below conductors to provide a vertical clearance of at least 43 inches. 6) If an evaporation pond is used to store the evaporater brine, the evaporation must be screened or otherwise modified to eliminate the potential for birds and wildlife to enter the pond. 7) Eliminate wastewater discharge as described in Condition SOILS&WATER 2.	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 procedures used or that will be used to implement these measures. The avian collision/electrocution monitoring plan annual report shall be provided to the project CPM no later than December 31 for each year monitoring is required.
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 foot print 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.	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.

BIO-12	The project owner shall submit to the CPM for review and approval a copy of the final Biological Resources Mitigation Implementation and Monitoring Plan. Protocol: The Biological Resources Mitigation Implementation and Monitoring Plan shall identify: ▪ all sensitive biological resources to be impacted, avoided, or mitigated by project construction and operation; ▪ all conditions agreed to in the USFWS Biological Opinion and CDFG Endangered Species Memorandum of Understanding; ▪ all mitigation, monitoring and compliance conditions included in the Commission's Final Decision; ▪ all conditions agreed to in the USACE Clean Water Act Permits; ▪ all conditions specified in the CDFG Streambed Alteration Permit, if required; ▪ required mitigation measures for each sensitive biological resource; ▪ required habitat compensation, including provisions for acquisition, enhancement and management, for any loss of sensitive biological resources; ▪ a detailed plan for protecting the existence and monitoring the integrity of the wetlands remaining on-site; ▪ a detailed description of measures that will be taken to avoid or mitigate temporary disturbances from construction activities; ▪ all locations, on a map of suitable scale, of laydown areas and areas requiring temporary protection and avoidance during construction; ▪ 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; ▪ monitoring duration for each type of monitoring and a description of monitoring methodologies and frequency; ▪ performance standards to be used to help decide if/when proposed mitigation is or is not successful; ▪ all remedial measures to be implemented if performance standards are not met; and ▪ a process for proposing plan modifications to the CPM and appropriate agencies for review and approval.	At least 45 days prior to rough grading, the project owner shall provide the CPM with the final version of the Biological Resources Mitigation Implementation and Monitoring Plan for this project, 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 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-13	The project owner shall provide a non-refundable $617,125 (less any discount negotiated with Wildlands, Inc.) in the form of a check or money order to Wildlands Incorporated to acquire and manage lands as compensation for the loss of habitat from SPP construction and operation. ***Protocol:*** Final determination of compensatory acres required will be determined by CEC after the project owner has submitted a final design of the project or by assuming a worse case estimate. The total number of compensatory acres shall account for the total number of acres lost for each habitat type impacted (Swainson's hawk habitat, wetland habitat, and giant garter snake habitat). If any habitat disturbance occurs beyond that covered by the $ 617,125 non-refundable amount, the project owner shall provide additional funds at current 1998 values of $52,000 per wetland acre, $ 1,500 per Swainson's hawk habitat acre, and $19,500 per giant garter snake habitat acre at ratios established by the CPM in consultation with USFWS and CDFG. The additional funds will be provided to Wildlands, Incorporated. Additional disturbance shall be determined by black and white aerial photographs taken before and after construction at a scale of 1" = 200' as specified in BIO-12.	Within sixty (60) days after the Commission Decision is issued, the project owner shall provide the CPM a copy of the land purchase agreement between the project owner and Wildlands, Incorporated. At least ten (10) days prior to construction, the project owner shall provide the CPM a copy of the check or money order delivered to Wildlands Incorporated. Within ninety (90) days prior to the start of construction, the project owner shall provide the CPM with aerial photos taken before construction. Within one hundred eighty (180) days after construction, the project owner shall provide the CPM aerial photos taken after construction and an analysis of the amount of any habitat disturbance additional to that determined in the FSA and compensated for by lands purchased. The CPM will notify the project owner of any additional amount of funds required to compensate for additional habitat disturbances at the adjusted market value at the time of construction.

NOISE		
NOISE-1	At least 15 days prior to the start of rough grading, the project owner shall notify all residents within one mile of the site, by mail or other effective means, of the commencement of project construction. At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.	The project owner shall transmit to the CPM in the first Monthly Construction Report following the start of rough grading a statement, signed by the project manager, attesting that the above notification has been performed, and describing the method of that notification. This statement shall also attest that the telephone number has been established and posted at the site.
NOISE-2	NOISE-2 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints. ***Protocol***: The project owner or authorized agent shall: ▪ use the Noise Complaint Resolution Form (see next page for example), or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint; ▪ attempt to contact the person(s) making the noise complaint within 24 hours; ▪ conduct an investigation to determine the source of noise related to the complaint; ▪ if the noise is project related, take all feasible measures to reduce the noise at its source; and ▪ submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts; and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to complainant's satisfaction.	Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the Sutter County Community Services Department and with the CPM documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30 day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.
NOISE-3	Prior to the start of project construction, the project owner shall submit to the CPM for review a noise control program. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA standards.	At least 30 days prior to the start of rough grading, the project owner shall submit to the CPM the above referenced program.
NOISE-4	The project owner shall conduct steam blows only during the hours of 7:00 a.m. to 8:00 p.m. weekdays, and 8:00 a.m. to 8:00 p.m. weekends and holidays. The project owner shall use a modern, low-pressure, continuous, "quiet" steam blow process and shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM.	At least 15 days prior to the first low-pressure continuous steam blow, the project owner shall submit to the CPM drawings or other information describing the process, including the noise levels expected and the expected time schedule for execution of the process.
NOISE-5	The project owner shall conduct a public notification program to alert residents within one mile of the site prior to the start of steam blow activities. The notification shall include a description of the purpose and nature of the steam blow(s), the proposed schedule, the expected sound levels and the explanation that it is a one-time operation and not a part of normal plant operations.	At least 15 days prior to the first steam blow(s), the project owner shall notify all residents within one mile of the site of the planned steam blow activity, and shall make the notification available to other area residents in an appropriate manner. The notification may be in the form of letters to the area residences, telephone calls, fliers or other effective means. Within five (5) days of notifying these entities, the project owner shall send a letter to the CPM confirming that they have been notified of the planned steam blow activities, including a description of the method(s) of that notification.

NOISE-6	Upon the project first achieving an output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey as a minimum. The survey shall also include the octave band pressure levels to ensure that no new pure-tone noise components have been introduced. If the results from the survey indicate that operation of the power plant causes noise levels in excess of 45 dBA (leq) measured at the nearest residence, additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit. No single piece of equipment shall be allowed to stand out as a dominant source of noise.	Within 30 days after first achieving an output of 80 percent or greater of rated output, the project owner shall conduct the above described noise survey. Within 30 days after completing the survey, the project owner shall submit a summary report of the survey to the Sutter County Community Services Department and the CPM. Included in the report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. Within 30 days of completion of installation of these measures, the project owner shall submit to the CPM a summary report of a new noise survey, performed as described above and showing compliance with this condition.
NOISE-7	The project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted within thirty (30) days after the facility is in full operation, and shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations sections 5095-5100 (Article 105) and Title 29, Code of Federal Regulations, Part 1910. The survey results shall be used to determine the magnitude of employee noise exposure. The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.	Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA upon request.
TRAFFIC AND TRANSPORTATION		
TRANS-1	The project owner shall comply with California Department of Transportation (Caltrans) and Sutter County limitation on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for both rail and roadway use.	In monthly compliance reports, the project owner shall submit copies of any oversize and overweight transportation permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.
TRANS-2	The project owner or its contractor shall comply with California Department of Transportation (Caltrans) and Sutter County limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.	In monthly compliance reports, the project owner shall submit copies of any encroachment permits received during that reporting period. In addition, the project owners shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.
TRANS-3	The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed.	The project owner shall include in its monthly compliance reports copies of all permits and licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances.
TRANS-4	The project owner shall require all truck deliveries using Highway 99 to use Oswald Road and South Township Road to the site and all truck deliveries using Highway 20 to use George Washington to Oswald Road and then South Township Road to the site.	The project owner shall include this specific route in its contracts for truck deliveries and maintain copies onsite for inspection by the CPM.
TRANS-5	All oversized equipment delivered by rail shall use the following route to the project site: Clark Road west to Broadway, south on Broadway to Nostra Road, west on Nostra Road to North Township, south on North Township to the SPP site. If the project owner finds another rail spur to be more advantageous, the project owner shall consult with Sutter County and request in writing approval for the use of that route from the CPM.	The project owner shall include this specific route in its contracts for oversized equipment delivery and maintain copies onsite for inspection by the CPM. If another route than that described in Condition of Certification TRANS-5 is found advantageous by the project owner, the project owner shall request approval in writing for the use of that route at least 30 days in advance of the use date.

TRANS-6	Prior to the start of construction, the project owner shall consult with Sutter County and will prepare a construction traffic control plan and implementation program which includes addressing the timing of heavy equipment and building materials deliveries; signing, lighting and traffic control device placement for natural gas pipeline and transmission line construction; and establishing construction work hours outside of peak traffic periods.	Thirty days prior to construction, the project owner shall provide to the CPM and to Sutter County Public Works Department for review and approval a copy of its construction traffic control plan and implementation program.
TRANS-7	Based on determination of primary roadways to be used in the traffic control plan and implementation program and following construction of the power plant and all related facilities, the licensee shall repair those primary roadways to original or as near original condition as possible.	Thirty days prior to construction, the licensee shall photograph the primary roadways. The licensee shall provide the CPM and Sutter County with a copy of these photographs. Within 30 days of the completion of project construction, the licensee will meet with the CPM and Sutter County Public Works Department to determine and receive approval for the actions necessary and schedule to complete the repair of those roadways to original or as near original condition as possible.
	SOIL AND WATER RESOURCES	
SOIL & WATER-1	The Sutter Power Project will utilize a 100 percent dry cooling technology. Wet or wet/dry cooling technology will not be used.	Once operation has begun, the Calpine shall provide to the CPM in the annual compliance report, a record of the average month groundwater consumption, the monthly average groundwater levels as measured in the project well(s), and the monthly average total dissolved solid (TDS) concentration in the project water supply.
SOIL & WATER-2	No project wastewater streams shall be discharged to surface water.	The volume and method of disposal for all wastewater streams shall be provided to the CEC CPM in the annual compliance report.
SOIL & WATER-3	Prior to the initiation of any earth moving activities, the project owner shall submit a final erosion control and revegetation plan for staff approval. The final plan shall contain all the elements of the draft plan contained in Calpine Data Response No. 33, dated March 4, 1998, with changes made to address the final design of the project.	The final erosion control and revegetation plan shall be submitted to the CPM for approval at least 30 days prior to the initiation of any earth moving activities.
SOIL & WATER-4	Prior to beginning any clearing, grading or excavation activities associated with construction of the power plant, transmission and gas lines, the project owner must submit a notice of intent to the State Water Resources Control Board to indicate that the project will operate under provisions of the General Construction Activity Storm Water Permit. As required by the general permit, the project owner will develop and implement a Storm Water Pollution Prevention Plan (SWPPP).	At least two weeks prior to the start of construction, the project owner will submit to the CPM a copy of the Storm Water Pollution Prevention Plan (SWPPP) for review and approval. This includes SWPPPs Developed for all linear facilities.
SOIL & WATER-5	The project owner shall submit to the California State Water Resources Control Board a notice of intent to comply with the provisions of the General Industrial Activities Storm Water Permit. The project owner shall develop and implement the required Storm Water Pollution Prevention Plan.	At least thirty 30 days prior to operation, the project owner shall submit to the CPM a copy of the Storm Water Pollution Prevention Plan that was prepared.
SOIL & WATER-6	The project owner shall provide on-site retention of stormwater during periods of high runoff to ensure that the project will not contribute to drainage problems. Periods of high runoff shall be considered 10-year, 24-hour storms or greater. The project owner shall prepare a report evaluating potential effects of stormwater runoff from the project site on downstream drainage facilities. Specifically, this report shall identify the volume of runoff anticipated from the proposed site for the twenty-five and 50-year, 24-hour storm, how this runoff will be accommodated on-site and the ability of the field drains, the North Drain and Pump Plant No. 2 to accommodate these flows, especially during 10-year, 24-hour or greater storms. The plan shall identify any improvements needed to be made to these facilities to ensure their ability to accommodate stormwater flows from the project. The plan shall also verify that the project's use of these drainage facilities and any necessary improvements to them has been coordinated with all public and private entities that own and/or are responsible for the operation and maintenance of all downstream drainage facilities affected by project runoff.	Thirty (30) days prior to the start of construction, the project owner shall submit for review and approval to the CEC CPM and the Sutter County Department of Public Works the proposed drainage plan.

SOIL & WATER-7	All sanitary wastewater shall be disposed into a sewage disposal system constructed and operated under permit from the Regional Water Quality Control Board or constructed to standards established by the Sutter County Environmental Health Division.	Prior to any earth moving activities or the issuance of a building permit, the project owner shall submit to the CPM a copy of the permit and waste discharge requirements or a copy of the permit from the County Environmental Health Division.
HAZARDOUS MATERIAL MANAGEMENT		
HAZ-1	The project owner shall not use any hazardous material in reportable quantities, as specified in Code of Federal Regulations, Part 40, Subpart F, Section 68.130, that is not listed in Tables 5.8-4 and 5.8-5 of the AFC (Ex. 4.), unless approved in advance by the California Energy Commission's Compliance Project Manager (CPM).	The project owner shall provide, in the Annual Compliance Report, a list of hazardous materials contained at the facility in reportable quantities.
HAZ-2	The project owner shall provide a Risk Management Plan and Process Safety Management Plan to the Sutter County Fire Department and the Energy Commission CPM for review and approval at the time the plans are first submitted to the U.S. Environmental Protection Agency (EPA) and the California Occupational Safety and Health Administration (Cal OSHA). The project owner shall reflect all recommendations of the Sutter County Fire Department and CPM in the final document. A copy of the final plans, reflecting all comments, shall be provided to the Sutter County Fire Department and the CPM once approved by EPA and Cal OSHA.	At least sixty (60) days prior to the delivery of anhydrous ammonia to the facility, the project owner shall provide the final approved plans listed above to the CPM.
HAZ-3	The project owner shall provide a letter from the Sutter County Fire Department indicating that adequate funding for fire protection resources has been identified and that such funding will be available to the Department as needed to ensure adequate emergency response capability.	At least 30 days prior to delivery of anhydrous ammonia to the facility, the project owner shall provide a copy of the letter described above from the Sutter County Fire Department.
WASTE MANAGEMENT		
WASTE-1	The project owner shall obtain a hazardous waste generator identification number and hazardous waste treatment permit for neutralization facilities from the Department of Toxic Substances Control prior to generating any hazardous waste.	The project owner shall keep copies of the identification number and permit on file at the project site and notify the CPM via the monthly compliance report of their receipt.
WASTE-2	The project owner shall notify the CPM of any waste management-related enforcement action taken or proposed to be taken against it, or against any waste hauler or disposal facility or treatment operator that the owner contracts with.	The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action.
WASTE-3	Prior to the start of both construction and of operation, the project owner shall prepare and submit to the Sutter County Community Services Department and the CPM a waste management plan for all wastes generated during construction and operation of the facility, respectively. The plans shall contain, at a minimum, the following: ▪ A description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and ▪ Methods of managing each waste, including treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, ▪ disposal requirements and sites, and recycling and waste minimization/reduction plans.	No less than 30 days prior to the start of construction, the project owner shall submit the construction waste management plan to the Sutter County Community Services Department and the CPM for review. The operation waste management plan shall be submitted no less than 60 days prior to the start of project operation. The project owner shall submit any required revisions within 30 days of notification of the need for such revisions by the CPM (or mutually agreed upon date).

WORKER SAFETY AND FIRE PROTECTION		
SAFETY-1	The project owner shall submit to the CPM a copy of the Project Construction Safety and Health Program as follows: ▪ Construction Injury and Illness Prevention Program ▪ Construction Fire Protection and Prevention Plan ▪ Personal Protective Equipment Program ***Protocol:*** The Construction Injury and Illness Prevention Program and the Personal Protective Equipment Program shall be submitted to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Consultation Service, for review and comment concerning compliance of the program with all applicable Safety Orders. The Construction Fire Protection and Prevention Plan shall be submitted to the Sutter County Fire Department for review and acceptance.	At least 30 days prior to the start of construction, or a date agreed to by the CPM, the project owner shall submit to the CPM a copy of the Project Construction Safety and Health Program, incorporating Cal/OSHA's Consultation Service comments, and a letter from the Sutter County Fire Department stating that they have reviewed and accepted the Construction Fire Protection and Prevention Plan and the Personal Protective Equipment Program.
SAFETY-2	The project owner shall submit to the CPM a copy of the Project Operation Safety and Health Program containing the following: ▪ Operation Injury and Illness Prevention Plan ▪ Emergency Action Plan ▪ Operation Fire Protection Plan ▪ Personal Protective Equipment Program ***Protocol:*** The Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Consultation Service, for review and comment concerning compliance of the program with all applicable Safety Orders. The Operation Fire Protection Plan and the Emergency Action Plan shall be submitted to the Sutter County Fire Department for review and acceptance.	At least 30 days prior to the start of operation, the project owner shall submit to the CPM a copy of the final version of the Project Operation Safety & Health Program. It shall incorporate Cal/OSHA Consultation Service comments and a letter from the Sutter County Fire Department stating that they have reviewed and accepted the specified elements of the proposed Operation Safety and Health Plan. The project owner shall notify the CPM that the Project Operation Safety and Health Program (Injury and Illness Prevention Plan, Fire Protection Plan, the Emergency Action Plan, and Personal Protective Equipment requirements), including all records and files on accidents and incidents, is present on-site and available for inspection.
SAFETY-3	The project owner shall design and install all exterior lighting to meet the requirements contained in the Visual Resources Conditions of Certification and in accordance with the American National Standards Practice for Industrial Lighting, ANSI/IES- RP-7.	Within 60 days after construction is completed, the project owner shall submit a statement to the CPM that the illuminance contained in ANSI/IES RP-7 were used as a basis for the design and installation of the exterior lighting.

CULTURAL RESOURCES		
CUL-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) and Western with the name(s) and qualifications of its designated cultural resource specialist and mitigation team members. The designated cultural resource specialist shall be responsible for implementing all the cultural resource Conditions of Certification, using qualified personnel to assist him or her in project-related field surveys, monitoring, data collection and artifact recovery, mapping, mitigation, analysis of recovered cultural resources and data, or report preparation. After CPM and Western approval of the Cultural Resource Monitoring and Mitigation Plan (described below in condition CUL-3), the designated cultural resource 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 and Western with a resume or statement of qualifications for its designated cultural resources specialist and mitigation team members. The resume(s) shall include the following information: 1) The resume for the designated cultural resource specialist shall demonstrate that the specialist meets the following minimum qualifications: a graduate degree in archaeology, anthropology, California history, or cultural resource management; at least three years of cultural resource mitigation and field experience in California, including at least one year's experience leading cultural resource field surveys; leading site mapping and data recording; marshalling equipment necessary and leading archaeological resource 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 materials and data; completing the identification and inventory of recovered cultural materials; and the preparation of appropriate reports to be filed with the receiving curation repository, the appropriate regional information center(s), the State Historic Preservation Officer, Western and the CPM. 2) The resume for the designated cultural 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 cultural resource specialist in project-related field surveys, monitoring, data and artifact recovery, mapping, mitigation, material analysis, or report preparation, the project owner shall also provide names, addresses, and resumes for these itigation team members. 4) If the CPM and Western determine that the qualifications of the proposed cultural resource 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 cultural resource specialist is replaced prior to completion of project mitigation, the project owner shall obtain CPM and Western approval of the new designated cultural resource specialist by submitting to the CPM and Western the name and qualifications of the proposed replacement specialist, at least ten (10) days prior to the termination or release of the preceding designated cultural resource specialist.	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 cultural resource specialist to the CPM and Western for review and written approval. Thirty (30) days prior to start of construction, the project owner shall confirm in writing to the CPM, who will notify Western, that the previously approved designated cultural resource specialist and the team of assistants are prepared to implement the monitoring and mitigation measures for cultural resources, as described in the Cultural Resources Monitoring and Mitigation Plan, prepared per condition CUL-3, below. At least ten (10) days prior to the termination or release of a designated cultural resource specialist, the project owner shall obtain CPM and Western approval of the new designated cultural resource specialist by submitting to the CPM and Western the name and resume of the proposed replacement specialist.

CUL-2	Prior to the start of project construction, the project owner shall provide the designated cultural resource specialist and the CPM with maps and drawings for the Sutter Power Plant project. The final center lines and right-of-way boundaries shall be provided on 7.5 minute quad maps, and the location of all the various areas where surface disturbance may be associated with project-related access roads, storage yards, laydown sites, pull sites, pump or pressure stations, Sutter Bypass switching station, on-site switchyard, electrical tower or pole footings, etc. Where the potential for impacts to significant cultural resources has been identified, the designated cultural resource specialist may request, and the project owner shall provide, enlargements of portions of the 7.5 minute maps presented as a sequence of strip maps for the linear facility routes. The strip maps shall show mile-post markers and the detailed locations of proposed access roads, storage or laydown sites, tower or pole footings, and any other areas of disturbance associated with the construction and maintenance of linear facilities.	At least ninety (90) days prior to the start of construction on the project, the project owner shall provide the designated cultural resource specialist, the CPM, and Western with final maps at appropriate scale(s) and drawings for all project facilities. Copies of all requests for more detailed maps by the designated cultural resource specialist shall also be submitted in writing to the CPM. There is no need to include Western in this submittal.
CUL-3	Prior to the start of project construction, the designated cultural resource specialist shall prepare a draft Cultural Resources Monitoring and Mitigation Plan to identify general and specific measures to minimize potential impacts to significant cultural resources. The CPM will review, and must approve in writing, the draft Cultural Resources Monitoring and Mitigation Plan. The CPM will provide copies of the draft plan to Western so that Western may submit this plan to the SHPO for concurrence prior to the project owner taking any actions under the approved monitoring and mitigation plan. ***Protocol***: The Cultural Resources Monitoring and Mitigation Plan shall include, but not be limited to, the following elements and measures: a. A discussion of the sequence of project-related tasks, such as any final pre-project surveys, fieldwork, flagging or staking; construction monitoring; mapping and data recovery; preparation for recovery of cultural resources; preparation of recovered materials for analysis, identification, and inventory; preparation of preliminary and final reports; and preparation of materials for curation. b. An identification of the person(s) expected to assist with each of the tasks identified in a, above, and a discussion of the mitigation team leadership and organizational structure, and the inter-relationship of tasks and responsibilities. c. Where sensitive areas are to be monitored during construction or avoided during operation, the designated cultural resource specialist shall identify measures such as flagging or fencing to prohibit or otherwise restrict access to sensitive resource areas. The discussion should address how these measures will be implemented prior to the start of construction and how long they will be needed to protect the resources from project-related effects. d. Where the need for monitoring of project construction activities has been determined by Western, the designated cultural resource specialist, in consultation with the CPM, will establish a schedule for the monitor(s) to be present. If the designated cultural resource specialist determines that the likelihood of encountering cultural resource or sites in certain areas is slight, monitoring may be discontinued in that location. e. If cultural resources are encountered are exposed during project-related grading, excavation, augering, and/or trenching, the designated cultural resource specialist shall have the authority to halt or redirect construction in the immediate vicinity of the find until the specialist can determine the significance of the find. The designated cultural resource specialist shall act in accordance with the following procedures: ▪ The project owner, or designated representative, shall inform the CPM and Western within one working day of the discovery of any potentially significant cultural resources and discuss the specific measure(s) proposed to mitigate potential impacts to these resources. ▪ The designated cultural resource specialist, representatives of the project owner, Western, and the CPM shall confer within 5 working days of the notification of the CPM, if necessary, to discuss any mitigation measures already implemented or proposed to be implemented, and to discuss the disposition of any finds. ▪ The SHPO will be consulted on potential eligibility, effect, and proposed mitigative measures. As the federal lead agency, Western will initiate the consultations with the SHPO. ▪ All required data recovery and cultural resource impact mitigation shall be completed as expeditiously as possible. f. All isolates encountered will be recorded and mapped; all lithic scatters	At least sixty (60) days prior to the start of construction on the project, the project owner shall provide the CPM and Western with a copy of the draft Cultural Resources Monitoring and Mitigation Plan prepared by the designated cultural resource specialist. The CPM and Western will provide written approval or disapproval of the proposed Cultural Resources Monitoring and Mitigation Plan within 15 days of receipt of the submittal. If the draft plan is not approved, the project owner, the designated cultural resource specialist, the CPM, and Western shall meet to discuss comments and work out necessary changes.

	and/or cultural resource sites will be recorded and mapped and all diagnostic artifacts will be collected for analysis; and all recovered cultural resource materials will be prepared and delivered for curation into a retrievable storage collection in a public repository or museum which meets the Title 36 Code of Federal Regulations 79 standards for the curation of cultural resource materials. g. The identification of the public institution that has agreed to receive any maps and data, records, reports, and any cultural resource materials recovered during project-related monitoring and mitigation work. Also include a discussion of any requirements or specifications for materials delivered for curation and how they will be met. The name and phone number of the contact person at the institution shall be included as well.	
CUL-4	Prior to the start of project construction, the project owner shall conduct a pre-construction reconnaissance and staking in all areas expected to be affected by construction and operation of the proposed project and its associated linear facilities. The staking of the linear facilities shall use the final design, centerlines, rights-of-way, and mile posts delineated in the construction drawings and maps prepared under condition of certification CUL-2. The designated cultural resource specialist will use the mile post stakes and boundary markers to identify sensitive areas with the potential to produce cultural resources and for implementation of specific measures, as described in condition CUL-8, below.	A least thirty (30) days prior to the start of construction, the project owner will complete a pre-construction reconnaissance and staking of the post miles and right-of- way boundaries in all areas expected to be affected by construction and operation of the proposed project and its associated linear facilities.
CUL-5	Prior to the start of construction on the project, the designated cultural resource specialist shall prepare an employee training program. The designated cultural resource specialist shall submit the training program to the CPM and Western for review and written approval. ***Protocol***: The training program will address the potential to encounter cultural resources during project-related site preparation and construction activities, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources. The training program shall also include the set of reporting procedures that workers are to follow if any cultural resources are encountered during project activities. This training program may be combined with other training programs prepared for paleontological and biological resources, hazardous materials, or any other areas of interest or concern.	At least thirty (30) days prior to the start of construction on the project, the project owner shall submit to the CPM and Western for review, comment, and written approval, the proposed employee training program and set of reporting procedures the workers are to follow if cultural resources are encountered during project construction. Western may be required to submit this training plan to the SHPO for concurrence as part of the consultation process. The CPM and Western shall provide written approval or disapproval of the employee training program and set of procedures within 15 days after receipt of the submittal. If the draft training program is not approved, the project owner, the designated cultural resource specialist, the CPM, and Western shall confer as needed to achieve any necessary changes.
CUL-6	Prior to the start of construction, and throughout the project construction period as needed for all new employees, the project owner and the designated cultural resource specialist shall provide the approved training to all project managers, construction supervisors, and workers who operate ground-disturbing equipment. The project owner and construction manager shall provide the workers with the approved set of procedures for reporting any cultural resources that may be discovered during project-related ground disturbance.	Prior to the start of construction, and throughout the project construction period as needed for all new employees, the project owner and the esignated cultural resource specialist shall present the CPM- and Western-approved training program on the potential for project impacts to sensitive cultural resources. The training shall include a set of reporting procedures for cultural resources encountered during project activities. The project owner shall provide documentation in the Monthly Compliance Report to the CPM that the employee training and the set of procedures have been provided to all project managers, construction supervisors, and to all workers.

CUL-7	Throughout the project construction period, the project owner shall provide the designated cultural resource specialist with a current schedule of anticipated weekly project activity and a map indicating the area(s) where construction activities will occur. The designated cultural resource specialist shall consult daily with the project superintendent or construction field manager to confirm the area(s) to be worked on the next day(s). Throughout the monitoring and mitigation phase of the project, the designated cultural resource specialist shall maintain a daily log of monitoring and mitigation activities carried out by the specialist and members of the cultural resource mitigation team. The designated cultural resource specialist shall prepare summary reports on monitoring activities, any cultural resource finds and recovery efforts, and the progress or status of the resource monitoring, mitigation, preparation, identification, and analytical work being conducted for the project. Copies of these summaries shall be included in the Monthly Compliance Reports filed with CPM by the project owner. The CPM will forward copies of these summary reports to Western. The designated cultural resource specialist may informally discuss the cultural resource monitoring and mitigation activities with their Energy Commission technical counterpart at any time.	The project owner shall include, in the Monthly Compliance Reports to the CPM, a summary of the daily logs prepared by the designated cultural resource specialist; the CPM will forward copies to Western.
CUL-8	The designated cultural resource specialist shall be present at the construction site at all times when construction-related grading, excavation, trenching, and/or augering occurs in areas that lie within the natural river levee zone (found to be generally associated with the Shanghai-Nueva-Columbia soils group). Project areas where the natural levee zones may be found include the switchyard site, and portions of the 16-inch and the 4-inch natural gas pipeline routes. Using the mile posts and boundary stakes placed by the project owner, the designated cultural resource specialist shall monitor the route of the 16-inch natural gas pipeline, between Mile Post (MP) 8.97 to 9.51; MP 10.42 to MP 11.41; and MP 12.1 to 13.70. For the route of the 4-inch natural gas pipeline, areas to be monitored full-time are from MP 0.00 to MP 1.60. Other sections of the linear facility routes may be monitored as deemed necessary by the CPM and Western.	The project owner shall include, in the Monthly Compliance Reports to the CPM, a summary of the daily logs prepared by the designated cultural resource specialist; the CPM will forward copies to Western.
CUL-9	If buried human remains are encountered during project-related grading, excavation, augering, and/or trenching, the construction crew shall halt or redirect construction in the immediate vicinity of the find and immediately contact the county coroner and the designated cultural resource specialist. If the coroner determines that the find is of Native American origin, the coroner shall notify the Native American Heritage Commission (NAHC) to request a determination of "most likely descendant". The NAHC is required to notify the descendant(s) and request that they inspect the burial and make recommendations for treatment or disposal. If Native American remains are encountered on federally managed land (within the Sutter National Wildlife Reserve), the US Fish and Wildlife Service is required to follow the procedures of the Native American Graves Protection and Repatriation Act, to repatriate the remains.	The designated cultural resource specialist shall notify the County Coroner, the project owner, the CPM, and Western if any buried human remains are encountered during project construction activities.
CUL-10	The project owner, through the designated cultural resource specialist, shall ensure the recovery, preparation for analysis, analysis, identification and inventory, the preparation for curation, and the delivery for curation of all significant cultural resource materials encountered and collected during the monitoring, data recovery, mapping, and mitigation activities related to the project.	The project owner shall maintain in its compliance files, copies of signed contracts or agreements with the designated cultural resource specialist and other qualified research specialists. These specialists will ensure the necessary recovery, preparation for analysis, analysis, identification and inventory, and preparation for curation of all significant cultural resource materials collected during monitoring, data recovery, mapping, and mitigation activities for the project. The project owner shall keep these files on-site and available for periodic audit by the CPM, for a period of at least two years after completion of the approved Final Cultural Resources Report.

CUL-11	The project owner shall ensure preparation of a Preliminary Cultural Resources Report following completion of data recovery and site mitigation work. The preliminary report is to be prepared by the designated cultural resource specialist and submitted to the CPM and Western for review and written approval. Western will provide copies of the preliminary report to the SHPO. ***Protocol***: The preliminary report shall include (but not be limited to) preliminary information on the survey report(s), methodology, and recommendations; site records and maps; determinations of significance; data recovery and other mitigation activities; discussion of possible results and findings of any analysis to be conducted on recovered cultural resource materials and data; proposed research questions that may be answered, or that may have been raised by the data from the project; related information such as maps, diagrams, charts, photographs and other appropriate materials; and an estimate of the time needed to complete the analysis of recovered cultural resource materials and prepare a final report. As the Federal lead agency, Western will provide a standard report format to be followed by the designated cultural resource specialist. If no cultural resource materials are recovered during project-related construction activities, the approved preliminary report shall also serve as the final report and shall be filed with appropriate entities, as described in conditions CUL-13 and CUL-14.	Within ninety (90) days following completion of the data recovery and site mitigation work, the project owner shall submit a copy of the Preliminary Cultural Resources Report to the CPM and Western for review, comment, and written approval.
CUL-12	The project owner will ensure preparation of a Final Cultural Resources Report by the designated cultural resource specialist, if cultural resource materials are found and recovered during project-related monitoring and mitigation. This final report shall be submitted to the CPM and Western for review and written approval. ***Protocol***: The final report shall include (but not be limited to) the survey report(s), methodology, and recommendations; site records and maps; description and inventory list of recovered cultural resource materials; determinations of sensitivity and significance; summary of data recovery and other mitigation activities; results and findings of any special analyses conducted on recovered cultural resource materials and data; research questions answered or raised by the data from the project; and the name and location of the public institution receiving the recovered cultural resource materials for curation. As the lead federal agency, Western will provide a standard report format to be followed by the designated cultural resource specialist.	The project owner shall submit a copy of the draft Final Cultural Resources Report to the CPM and Western for review, comment, and written approval. The report shall be submitted to the CPM and Western within ninety (90) days following completion of the analysis of the recovered cultural materials and preparation of related information. The project owner shall submit a copy of the final cultural resources report to the CPM and Western for review and written approval.
CUL-13	The project owner shall ensure that Western is provided with an original (or an original-quality) copy of the approved Final Cultural Resources Report, and other copies necessary to submit to the public institution receiving the recovered data and materials for curation, to the SHPO, and to the appropriate regional archaeological information center(s). A legible copy of the approved Final Cultural Resource Report shall be filed with the CPM, with a request for confidentiality, if needed to protect any sensitive resources or sites. The report copy sent to the curating institution and to the appropriate regional information centers shall include the information required by 36 Code of Federal Regulations 79 and the regional archaeological information centers.	The project owner shall maintain in its compliance files, copies of all documentation related to the filing of the original materials and the approved final cultural resources report with the public institution receiving the recovered data and materials for curation, with the appropriate regional archaeologic information repository(ies), and the SHPO. If no cultural resource materials were recorded or recovered, then the approved Preliminary Cultural Resources Report shall serve as the final report and is to be filed with these same agencies.
CUL-14	Within thirty (30) days following filing of the Final Cultural Resources Report with the CPM, Western, and the appropriate entities, the project owner, through the designated cultural resource specialist, shall deliver for curation all cultural resource materials collected during data recovery and mitigation for the project. The materials shall be delivered for curation into a public repository which meets the U.S. Secretary of Interior requirements for the curation of cultural resource materials.	The project owner shall maintain in its project history or compliance files, copies of signed contracts or agreements with the museum(s), niversity(ies), or other appropriate public repository(ies) by which the project owner has provided for delivery for curation of all the cultural resource materials collected during data recovery and site mitigation for the project.

PALCONTOLOGIC RESOURCES		
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.	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-2	Prior to the start of project construction, the project owner shall provide the designated paleontologic resource specialist and the CPM with maps and drawings for the Sutter Power Plant Project. The final center lines and right-of-way boundaries shall be provided on 7.5 minute quad maps, and the location of all the various areas where surface disturbance may be associated with project-related access roads, storage yards, laydown sites, pull sites, pump or pressure stations, switchyards, electrical tower or pole footings, etc. Where the potential for impacts to significant paleontologic resources has been identified, the designated paleontologic resources specialist may request, and the project owner shall provide, enlargements of portions of the 7.5 minute maps presented as a sequence of strip maps for the linear facility routes. The strip maps would show post mile markers and the detailed locations of proposed access roads, storage or laydown sites, tower or pole footings, and any other areas of disturbance associated with the construction and maintenance of linear facilities.	At least ninety (90) days prior to the start of construction on the project, the project owner shall provide the designated paleontologic resource specialist and the CPM with final maps at appropriate scale(s) and drawings for all project facilities. Any request for more detailed maps by the designated paleontologic resource specialist shall also be submitted in writing to the CPM.
PAL-3	Prior to the start of project construction, the designated paleontologic resource specialist shall prepare a draft Paleontologic Resources Monitoring and Mitigation Plan to identify general and specific measures to minimize potential impacts to sensitive paleontologic resources. The CPM will review and must approve in writing the draft Paleontologic Resources Monitoring and Mitigation Plan. After CPM approval, the project owner's designated paleontologic resource specialist and designated paleontologic resource team shall be available to implement the Monitoring and Mitigation Plan, as needed throughout project construction. ***Protocol:*** The Paleontologic Resources Monitoring and Mitigation Plan shall include, but not be limited to, the following elements and measures: a. A discussion of the sequence of project-related tasks, such as any final pre-project surveys, fieldwork, flagging or staking; construction monitoring; mapping and data recovery; fossil preparation and recovery; preparation for analysis, identification, and inventory; preparation of preliminary and final reports; and preparation of materials for curation. b. An identification of the person(s) expected to assist with each of the tasks identified in a, above, and a discussion of the mitigation team leadership and organizational structure, and the inter-relationship of tasks and responsibilities. c. Where sensitive areas are to be avoided during construction and/or operation, the designated paleontologic resource specialist shall identify measures such as flagging or fencing to prohibit or otherwise restrict access to sensitive resource areas. The discussion should address how these measures will be implemented prior to the start of construction and how long they will be needed to protect the resources from project-related effects. d. Where monitoring of project construction activities is deemed necessary by the designated paleontologic resource specialist, the specialist will determine the size or extent of the areas where monitoring is to occur and will establish a schedule for the monitor(s) to be present. If the designated specialist determines that the likelihood of encountering fossil resources in certain areas is slight, monitoring may be discontinued in that location. e. If fossil-bearing sediments or fossil materials are encountered on the surface or are exposed during project-related grading, augering, and/or trenching, the designated paleontologic resource specialist shall have the authority to halt or redirect construction in the immediate vicinity of the find until he or she can determine the significance of the find. The designated paleontologic resources specialist shall act in accordance with the following procedures: ▪ The project owner, or its designated representative, shall inform the CPM within one working day of the discovery of any potentially significant paleontologic resources and discuss the specific measure(s) proposed to mitigate potential impacts to these resources. ▪ The designated paleontologic resource specialist, representatives of the project owner, and the CPM shall confer within five working days of the notification of the CPM, if necessary, to discuss any mitigation measures already implemented or proposed to be implemented and to discuss the disposition of any finds. ▪ All necessary and required data recovery and mitigation shall be completed as expeditiously as possible. f. Include a discussion of the designated paleontologic resource specialist's access to equipment and supplies necessary for recovery of fossil	At least forty-five (45) days prior to the start of construction on the project, the project owner shall provide the CPM with a copy of the draft Monitoring and Mitigation Plan prepared by the designated paleontologic resource specialist. The CPM shall provide written approval or disapproval of the proposed Paleontologic Resources Monitoring and Mitigation Plan within 15 days of receipt of the submittal. If the draft plan is not approved, the project owner, the designated paleontologic resources specialist, and the CPM shall meet to discuss comments and achieve necessary changes.

	materials and matrix samples. This should include information on the types and availability of specialized equipment and supplies needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits. g. All paleontologic resource localities, rock units, and sediment and stratigraphic boundaries encountered shall be recorded (may include photos) and mapped; all vertebrate fossils and trackways, and all diagnostic invertebrate and plant fossils shall be stabilized, prepared and recovered for identification and analysis; adequate samples of potentially fossil-bearing matrix shall be collected and screen washed for sorting and analysis of micro-fossils; recovered fossil materials shall be analyzed and identified to the genus level whenever possible; and all recovered fossil materials shall be inventoried, prepared, and delivered for curation into a retrievable storage collection in a public repository or museum which meets the Society of Vertebrate Paleontologists (SVP) standards and requirements for the curation of paleontologic resources; h. Identify the institution that has agreed to receive any data and fossil materials recovered during project-related monitoring and mitigation work. Discuss any requirements or specifications for materials delivered for curation and how they will be met. Also include the name and phone number of the contact person at the institution.	
PAL-4	Prior to the start of project construction, the project owner shall conduct a pre-construction reconnaissance and staking in all areas expected to be affected by construction and operation of the proposed project and its associated linear facilities. The staking of the linear facilities shall use the final design, centerlines, rights-of-way, and post miles delineated in the construction drawings and maps prepared under Condition of Certification PAL-2. The designated paleontologic resources specialist will use the post mile stakes and boundary markers to identify sensitive areas with the potential to produce paleontologic resources and for implementation of specific measures, as described in Condition PAL-8, below.	A least thirty (30) days prior to the start of construction, the project owner shall complete a pre-construction reconnaissance and staking of mile-posts and right-of-way boundaries in all areas expected to be affected by construction and operation of the proposed project and its associated linear facilities.
PAL-5	Prior to the start of construction on the project, the designated paleontologic resources specialist shall prepare an employee training program. The designated paleontologic resource specialist shall submit the training program to the CPM for approval. ***Protocol:*** The training program will discuss the potential to encounter fossil resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources. The training shall also include the set of reporting procedures that workers are to follow if sensitive paleontologic resources are encountered during project activities. The training program will be presented by the designated paleontologic resources specialist and may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or any other areas of interest or concern.	At least thirty (30) days prior to the start of construction on the project, the project owner shall submit to the CPM for review, comment, and written approval, the proposed employee training program and set of reporting procedures the workers are to follow if paleontologic resources are encountered during project construction. The CPM shall provide the project owner with written approval or disapproval of the employee training program and the set of procedures within 15 days of receipt of the submittal. If the draft training program is not approved, the project owner, the designated paleontologic resources specialist, and the CPM shall meet to discuss the comments and work out necessary changes.
PAL-6	PAL-6 Prior to the start of construction, and throughout the project construction periodas needed for all new employees, the project owner and the designated paleontologic resource specialist shall provide the CPM-approved training to all project managers, construction supervisors, and workers who operate ground disturbing equipment. The project owner and construction manager shall provide the workers with the CPM-approved set of procedures for reporting any sensitive paleontologic resources or fossil-bearing sediments that may be discovered during project-related ground disturbance.	Prior to the start of construction, and throughout the project construction period as needed for all new employees, the project owner and the designated paleontologic resources specialist shall present the CPM-approved training program on the potential for project impacts to sensitive paleontologic resources. The training shall include a set of reporting procedures for paleontologic resources encountered during project activities. The project owner shall provide documentation in the Monthly Compliance Report to the CPM that the employee training and the set of procedures have been provided to all project managers, construction supervisors, and to all workers.

PAL-7	Throughout the project construction period, the project owner shall provide the designated paleontologic resource specialist with a current schedule of anticipated weekly project activity and a map indicting the area(s) where construction activities will occur. The designated paleontologic resource specialist shall consult daily with the project superintendent or construction field manager to confirm the area(s) to be worked on the next day(s). Throughout the paleontologic resources pre-construction reconnaissance, monitoring and mitigation phases of the project, the designated paleontologic resources specialist shall keep a daily log of any fossil resource finds and the progress or status of the surveys, resource monitoring, mitigation, preparation, identification, and analytical work being conducted for the project. The designated paleontologic resource specialist may informally discuss the paleontologic resource monitoring and mitigation activities with the Commission technical counterpart.	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.
PAL-8	PAL-8 The designated paleontologic resource specialist 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 correlate 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, 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.	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.
PAL-9	The project owner, through the designated paleontologic resources specialist, shall ensure the recovery, preparation for analysis, analysis, identification and inventory, the preparation for curation, and the delivery for curation of all significant paleontologic resource materials encountered and collected during pre-construction surveys and during the monitoring, data recovery, mapping, and mitigation activities related to the project.	The project owner shall maintain, in its compliance files, copies of signed contracts or agreements with the designated paleontologic resource specialist and other qualified research specialists. These specialists will ensure the necessary data and fossil recovery, mapping, preparation for analysis, analysis, identification and inventory, and preparation and delivery for curation of all significant paleontologic resource materials collected during data recovery and mitigation for the project. The project owner shall keep these files available for periodic audit by the CPM.
PAL-10	The project owner shall ensure preparation of a Preliminary Paleontologic Resources Report following completion of data recovery and site mitigation work. The preliminary report is to be prepared by the designated paleontologic resources specialist and submitted to the CPM for review, comment, and written approval. ***Protocol:*** The preliminary report shall include (but not be limited to) preliminary information on the survey report(s), methodology, and recommendations; site records and maps; determinations of sensitivity and significance; data recovery and other mitigation activities; possible results and findings of any analysis to be conducted on recovered paleontologic resource materials and data; proposed research questions that may be answered or may have been raised by the data from the project; and an estimate of the time needed to complete the analysis of recovered fossil materials and prepare a final report. If no fossil resources were recovered during project construction, the CPM-approved preliminary report shall also serve as the final report and shall be filed with appropriate entities, as described in conditions PAL-11 and PAL-12.	Within ninety (90) days following completion of the data recovery and site mitigation work, the project owner shall submit a copy of the Preliminary Paleontologic Resources Report to the CPM for review, comment, and written approval.

PAL-11	The project owner shall ensure preparation of a Final Paleontologic Resources Report by the designated paleontologic resources specialist if significant fossil resources are found and recovered during project-related surveys, monitoring and mitigation. ***Protocol:*** The final report shall include (but not be limited to) the survey report(s), methodology, and recommendations; locality records and maps; description and inventory list of recovered fossil materials; determinations of sensitivity and significance; summary of data recovery and other mitigation activities; results and findings of any special analyses conducted on recovered paleontologic resource materials and data; research questions answered or raised by the data from the project; and the name and location of the public institution receiving the recovered paleontologic resources for curation.	The project owner shall submit a copy of the draft Final Paleontologic Resources Report to the CPM for review, comment and written approval. The draft Final Paleontologic Resources Report shall be submitted to the CPM within ninety (90) days following completion of the analysis of the recovered fossil materials and preparation of text and related information, such as maps, diagrams, tables, charts, photos, etc.
PAL-12	The project owner, through the designated paleontologic resources specialist, shall submit an original, or an original-quality, copy of the CPM-approved Final Paleontologic Resources Report to the public institution receiving the recovered data and materials for curation, to the Museum of Paleontology at UC Berkeley, and to the appropriate regional information center(s). A legible copy of the approved Final Paleontologic Resources Report shall be filed with the CPM, with a request for confidentiality if needed to protect any sensitive resources or sites. ***Protocol:*** The copies of the CPM-approved Final Report sent to the entities identified above shall include the following (as applicable to the project findings set forth in the final report): clean and reproducible original copies of all text; originals of any topographic maps showing site and resource locations, boundaries of underlying rock units and stratigraphy; original or clear copies of drawings of significant paleontologic resource materials found during pre-construction surveys, during project-related monitoring, data recovery, and mitigation; and photographs (including a set of negatives, if possible) of the locality(ies) and the various paleontologic resource materials recovered during project monitoring and mitigation and subjected to post-recovery analysis and evaluation.	The project owner shall maintain, in its compliance files, copies of all documentation related to the filing of the original materials and the CPM-approved Final Paleontologic Resources Report with the public institution receiving the data and recovered materials for curation, the UC Museum of Paleontology at Berkeley, and the appropriate paleontologic information repository(ies). If no significant paleontologic resources were recorded or recovered, then the CPM-approved Preliminary Paleontologic Resources Report shall serve as the final report and shall be filed with these same entities.
PAL-13	Within thirty (30) days following filing of the Final Paleontologic Report with the appropriate entities, the project owner shall deliver for curation all paleontologic resource materials collected during data recovery and mitigation for the project. The materials shall be delivered for curation into a public repository which meets Society for Vertebrate Paleontology (SVP) requirements for the curation of paleontologic resources.	The project owner, through the designated paleontologic resources specialist, shall maintain in its project history or compliance files copies of signed contracts or agreements with the museum(s), university(ies), or other appropriate public repository(ies), to which the project owner has provided for delivery and curation of all the paleontologic resource materials collected during data recovery and site mitigation for the project.
ALTERNATIVES (NO CONDITIONS)		
FACILITY DESIGN		
GEN-1	The project owner shall design, construct and inspect the project in accordance with the California Building Code (CBC) and all other applicable LORS listed in Appendices 9A through 9G of the Application for certification (AFC), in effect at the time initial design plans are submitted to the CBO for review and approval. The CBC in effect is that edition that has been adopted by the California Building Standards Commission, and published at least 180 days previously. In the event the SPP is subject to the 1998 CBC, the 1995 CBC provisions identified herein shall be replaced with the applicable successor provisions. The purpose of the code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures and certain equipment regulated by the CBC. Where, in any specific case, different sections of the code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.	Within 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) after receipt of the Certificate of Occupancy, the project owner shall submit to the CPM a statement of verification, signed by the responsible engineer, attesting that all design, construction, installation and inspection requirements of the applicable LORS and the Commission's Decision have been met for facility design. The project owner shall provide the CPM a copy of the Certificate of Occupancy in the next Monthly Compliance Report after receipt of the permit from the CBO [Section 109 — Certificate of Occupancy.]

GEN-2	The project owner shall furnish to the California Energy Commission Compliance Project Manager (CPM) and to the CBO, a schedule of facility design submittals, a Master Drawing List, and a Master Specifications List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see a list of major structures and equipment below). To facilitate audits by commission staff, the project owner shall provide designated packages to the CPM when requested. All the Sections, Chapters, Appendices and Tables, unless otherwise stated, refer to Sections, Chapters, Appendices and Tables of the 1995 California Building Code. FACILITY DESIGN 514 October 19, 1998 **Major Structures** Combustion Turbine Generator (CTG) Pedestal and Foundation Steam Turbine Generator (STG) Pedestal and Foundation CTG Enclosure Structure STG Enclosure Structure Air Inlet Filtration with Evaporative Cooler Structure Cooling Tower Heat Recovery Steam Generator (HRSG) Structure and Foundation Exhaust Stack and Foundation Field-Fabricated Tanks and Foundations Shop-Fabricated Tanks and Foundations Condenser Support Structure and Foundations Equipment Foundations (compressors, pumps, transformers) Switchyard Control/Administration Building Pipe Rack Structures Transformer Dead end Structure Major Equipment CTG STG Fired HRSG Shop-Fabricated Pressure Vessels STG Condenser Main Step-up Transformers Boiler Feed Pumps Condensate Pumps Switchgear Cycle Water Chemical Storage	At least 60 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The project owner shall provide schedule updates in the Monthly Compliance Report.
GEN-3	The project owner shall make payments to the CBO equivalent to the fees listed in Chapter 1, Section 107 and Table 1-A — Building Permit Fees, Appendix Chapter 33, Section 3310 and Table A-33-A — Grading Plan Review Fees, and Table A-33-B — Grading Permit Fees. If Yuba City, Sutter County or Colusa County has adjusted the CBC fees, for design review, plan check and construction inspection, the project owner shall pay the adjusted fees.	The project owner shall make the required payments to the CBO at the time of submittal of the plans, design calculations, specifications, or soil reports. The October 19, 1998 515 FACILITY DESIGN

GEN-4	Prior to the start of site preparation, the project owner shall assign a California registered architect, structural engineer or civil engineer, as a resident engineer (RE), to be in general responsible charge of the project. [Building Standards Administrative Code (part 1, title 24, C.C.R.), Section 4-209 — Designation of Responsibilities.] The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project respectively. A project may be divided into parts, provided each part is clearly defined as a distinct unit. Separate assignment of general responsible charge may be made for each designated part. *Protocol:* The RE shall: 1. monitor construction progress to ensure compliance with the design intent; 2. ensure that construction of all the facilities conforms, in every material respect, to the applicable LORS, approved plans, and specifications; 3. prepare documents to initiate changes in the approved drawings and specifications when directed by the project owner or as required by conditions on the project; 4. be responsible for providing the project inspectors and testing agency(ies) with complete and up-to-date set(s) of stamped drawings, plans, specifications and other required documents; 5. be responsible for the timely submittal of construction progress reports to the CBO from the project inspectors, the contractor, and other engineers who have been delegated responsibility for portions of the project; and 6. be responsible for notifying the CBO of corrective action or the disposition of items noted on laboratory reports or other tests as not conforming to the approved plans and specifications. The RE shall have the authority to halt construction and to require changes or remedial work if the work does not conform to applicable requirements. FACILITY DESIGN 516 October 19, 1998 If the RE or the delegated engineers are reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the name, qualifications and registration number of the RE and any other delegated engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the RE and other delegated engineer(s) within five days of the approval. If the RE or the delegated engineer(s) are subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

GEN-5	Prior to the start of site preparation, the project owner shall assign at least one of each of the following California registered engineers to the project: A) a civil engineer; B) a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering; C) a design engineer who is either a structural engineer or a civil engineer who is fully competent and proficient in the design of power plant structures and equipment supports; D) a mechanical engineer; and E) an electrical engineer. [California Business and Professions Code Section 6704 et seq; and Section 6730 and 6736. Requires state registration to practice as a civil engineer or Structural Engineer in California.] The tasks performed by the civil, mechanical, electrical or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (e.g. proposed earthwork, civil structures, power plant structures, equipment support). No segment of the project shall have more than one responsible engineer. The transmission line may be the responsibility of a separate California registered electrical engineer. The project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of the lead engineer responsible for each segment. [Section 104.2 — Powers and Duties of Building Official.] f any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned engineer to the CBO for October 19, 1998 517 FACILITY DESIGN review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer. ***Protocol: - A:*** The civil engineer shall: 1. design (or be responsible for design), stamp, and sign all plans, calculations, and specifications for proposed site work, civil works, and related facilities to comply with the Energy Commission Decision. At a minimum, these include: grading, site preparation, excavation, compaction, construction of secondary containment, foundations, erosion and sedimentation control structures, drainage facilities, underground utilities, culverts, site access roads, and sanitary sewer systems; and 2. provide consultation to the RE during the construction phase of the project, and recommend changes in the design of the civil works facilities and changes in the construction procedures. **Protocol: - B:** The geotechnical engineer or civil engineer experienced and knowledgeable in the practice of soils engineering: 1. review all the engineering geology reports, and prepare a final soils grading report; 2. prepare the soils engineering reports required by Appendix Chapter 33, Section 3309.5 — Soils Engineering Report, and Section 3309.6 — Engineering Geology Report. 3. be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in Appendix Chapter 33, Section 3317 —Grading Inspections. 4. recommend field changes to the civil engineer and RE; 5. review the geotechnical report, field exploration report, laboratory tests, and engineering analyses detailing the nature and extent of the site soils that may be susceptible to liquefaction, rapid settlement or collapse when saturated under load; and 6. prepare reports on foundation investigation to comply with Chapter 18, Section 1804 — Foundation Investigations. This engineer shall be authorized to halt earthwork and to require changes, if site conditions are unsafe or do not conform with predicted conditions used as a basis for design of earthwork or foundations. [Section 104.2.4 — Stop orders.] FACILITY DESIGN 518 October 19, 1998 ***Protocol: - C:*** The design engineer shall: 1. be directly responsible for the design of the proposed structures and equipment supports; 2. provide consultation to the RE during design and construction of the project; 3. monitor construction progress to ensure compliance with the design intent; 4. evaluate and recommend necessary changes in design; and 5. prepare and sign all major building plans, specifications and calculations. ***Protocol: - D:*** The mechanical engineer shall be responsible for, and sign	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the names, qualifications and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the CBO's approvals of the engineers within five days of the approval. If the designated responsible engineer is subsequently reassigned or replaced, the project owner has 15 days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer within five days of the approval.

	and stamp a statement with, each mechanical submittal to the CBO stating that the proposed final design plans, specifications, and calculations conform with all of the mechanical engineering design requirements set forth in the Energy Commission Decision. ***Protocol: - E:*** The electrical engineer shall: 1. be responsible for the electrical design of the project; and 2. sign and stamp all electrical design drawings, plans, specifications, and calculations.	
GEN-6	Prior to the start of an activity requiring special inspection, the project owner shall assign to the project, qualified and certified special inspector(s) who shall be responsible for the special inspections required by Chapter 17, Section 1701 — Special Inspections and Section 1701.5 October 19, 1998 519 FACILITY DESIGN— Type of Work (requiring special inspection), Section 106.3.5 —Inspection and observation program. ***Protocol:*** The Special Inspector shall: 1. be a qualified person who shall demonstrate competence, to the satisfaction of the CBO, for inspection of the particular type of construction requiring special or continuous inspection; 2. observe the work assigned for conformance with the approved design drawings and specifications; 3. furnish inspection reports to the CBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction, then, if uncorrected, to the CBO and the CPM; and 4. submit a final signed report to the RE, CBO, and CPM, stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable provisions of the applicable edition of the CBC. Welding performed on-site requiring special inspection (including structural, piping, tanks and pressure vessels) shall be inspected by a certified weld inspector (certified AWS and/or ASME as applicable).	At least 15 days prior to the start of an activity requiring special inspection, the project owner shall submit to the CBO for review and approval, with a copy to the CPM, the name(s) and qualifications of the certified weld inspector(s), or other certified special inspector(s) assigned to the project to perform one or more of the duties set forth above. The project owner shall also submit to the CPM a copy of the CBO's approval of the qualifications of all special inspectors in the next Monthly Compliance Report. If the special inspector is subsequently reassigned or replaced, the project owner has five days in which to submit the name and qualifications of the newly assigned special inspector to the CBO for approval. The project owner shall notify the CPM of the CBO's approval of the newly assigned inspector within five days of the approval.
GEN-7	The project owner shall keep the CBO informed regarding the status of construction. If any discrepancy is discovered during construction, the project owner shall prepare and submit a non-conformance report (NCR) describing the nature of the discrepancy to the CBO. The NCRs shall reference this condition of certification, and applicable sections of the applicable edition of the CBC. FACILITY DESIGN 520 October 19, 1998	The project owner shall submit NCRs, as necessary, within five days, and shall submit a periodic construction progress report to the CBO according to the reporting frequency required by the CBO. A list of the NCRs for the reporting month shall also be included in the next Monthly Compliance Report.
GEN-8	The project owner shall obtain the CBO's final approval of all completed work. The project owner shall request the CBO to inspect the completed structure and review the submitted documents. When the work and the "as-built" and "as graded" plans conform with the approved final plans, the project owner shall notify the CPM regarding the CBO's final approval. The marked up "as-built" drawings for the construction of structural and architectural work shall be submitted to the CBO. Changes approved by the CBO shall be identified on the "as-built" drawings. [Section 108 — Inspections.]	Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM, (a) written notice that the completed work is ready for final inspection, and (b) a signed statement that the work conforms to the final approved plans.
GEO-1	Prior to the start of construction, the project owner shall assign to theproject an engineering geologist(s), certified by the State of California, tocarry out the duties required by Appendix Chapter 33, Section 3309.4. The certified engineering geologist(s) assigned must be approved by the CPM (the functions of the engineering geologist can be performed by the responsible geotechnical engineer, if that person has the appropriate California license).	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction, the project owner shall submit to the CPM for approval, the name(s) and license number(s) of the certified engineering geologist(s) assigned to the project. The submittal should include a statement that CPM approval is needed. The CPM will approve or disapprove of the engineering geologist(s) and will notify the project owner of its findings within 15 days of receipt of the submittal. If the engineering geologist(s) is subsequently replaced, the project owner shall submit for approval the name(s) and license number(s) of the newly assigned individual to the CPM. The CPM will approve or disapprove of the engineering geologist(s) and will notify the project owner of the findings ithin 15 days of receipt of the notice of personnel change.

GEO-2	The assigned engineering geologist shall carry out the duties required byAppendix Chapter 33, Section 3309.4 — Engineered Grading Requirement, and Section 3318.1 — Final Reports. Those duties are: 1. Prepare the Engineering Geology Report. This report shall accompany the Plans and Specifications when applying to the CBO for the grading permit. 2. Monitor geologic conditions during construction. 3. Prepare the Final Geologic Report. ***Protocol:*** The Engineering Geology Report required by Appendix Chapter 33, Section 3309.3 — Grading Designation, and shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and an opinion on the adequacy, for the intended use, of the site as affected by geologic factors. The Final Geologic Report to be completed after completion of grading, as required by Appendix Chapter 33, Section 3318.1, and shall contain the following: A final description of the geology of the site and any new information disclosed during the grading and the effect of same on recommendations incorporated in the approved grading plan. Engineering geologists shall submit a statement that, to the best of their knowledge, the work within their area of responsibility is in accordance with the approved Engineering Geology Report and applicable provisions of this chapter.	(1) Within 15 days after submittal of the application(s) for grading permit(s) to the CBO, the project owner shall submit a signed statement to the CPM stating that the Engineering Geology Report has been submitted to the CBO as a supplement to the plans and specifications and that the recommendations contained in the report are incorporated into the plans and specifications; (2) Within 90 days following completion of the final grading, the project owner shall submit copies of the Final Geologic Report required by Appendix Chapter 33, Section 3309.3, to the CPM and the CBO. 1.
CIVIL-1	Prior to the start of site grading, the project owner shall submit to the CBO for review and approval the following: 1. design of the proposed drainage structures and the grading plan; 2. an erosion and sedimentation control plan; 3. related calculations and specifications, signed and stamped by the responsible civil engineer; and 4. soils report as required by Appendix Chapter 33, Section 3309.5 — Soils Engineering Report and Section 3309.6 — Engineering Geology Report.	At least 15 days prior to the start of site grading, the project owner shall submit the documents described above to the CBO for review and approval. In the next Monthly Compliance Report following the CBO's approval, the project owner shall FACILITY DESIGN 522 October 19, 1998 submit a written statement certifying that the documents have been approved by the CBO.
CIVIL-2	The resident engineer shall, if appropriate, stop all earthwork and construction in the affected areas when the responsible geotechnical engineer or civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area. [Section 104.2.4 — Stop orders.]	The project owner shall notify the CPM, within five days, when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within five days of the CBO's approval, the project owner shall provide to the CPM a copy of the CBO's approval to resume earthwork and construction in the affected areas.
CIVIL-3	The project owner shall perform inspections in accordance with Section 108 — Inspections, Chapter 17, Section 1701.6 — Continuous and periodic special inspection and Appendix Chapter 33, Section 3317 —Grading inspection. All plant site grading operations shall be subject to inspection by the CBO and the CPM. If, in the course of inspection, it is discovered that the work is not being done in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report detailing all discrepancies and non-compliance items, and the proposed corrective action and send copies to the CBO and the CPM.	Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a non-conformance report (NCR), and the proposed corrective action. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs for the reporting month shall also be included in the following Monthly Compliance Report.
CIVIL-4	After completion of finished grading and erosion and sedimentation control and drainage facilities, the project owner shall obtain the CBO's approval of the final "as-graded" grading plans, and final "as-built" plans for the erosion and sedimentation control facilities. [Section 109 —Certificate of Occupancy]	Within 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) of the completion of the erosion and sediment control mitigation and drainage facilities, the project owner shall submit to the CBO the October 19, 1998 523 FACILITY DESIGN responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes. The project owner shall submit a copy of this report to the CPM in the next Monthly Compliance Report.

GEO-2	The assigned engineering geologist shall carry out the duties required byAppendix Chapter 33, Section 3309.4 — Engineered Grading Requirement, and Section 3318.1 — Final Reports. Those duties are: 1. Prepare the Engineering Geology Report. This report shall accompany the Plans and Specifications when applying to the CBO for the grading permit. 2. Monitor geologic conditions during construction. 3. Prepare the Final Geologic Report. ***Protocol:*** The Engineering Geology Report required by Appendix Chapter 33, Section 3309.3 — Grading Designation, and shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and an opinion on the adequacy, for the intended use, of the site as affected by geologic factors. The Final Geologic Report to be completed after completion of grading, as required by Appendix Chapter 33, Section 3318.1, and shall contain the following: A final description of the geology of the site and any new information disclosed during the grading and the effect of same on recommendations incorporated in the approved grading plan. Engineering geologists shall submit a statement that, to the best of their knowledge, the work within their area of responsibility is in accordance with the approved Engineering Geology Report and applicable provisions of this chapter.	(1) Within 15 days after submittal of the application(s) for grading permit(s) to the CBO, the project owner shall submit a signed statement to the CPM stating that the Engineering Geology Report has been submitted to the CBO as a supplement to the plans and specifications and that the recommendations contained in the report are incorporated into the plans and specifications; (2) Within 90 days following completion of the final grading, the project owner shall submit copies of the Final Geologic Report required by Appendix Chapter 33, Section 3309.3, to the CPM and the CBO. 1.
CIVIL-1	Prior to the start of site grading, the project owner shall submit to the CBO for review and approval the following: 1. design of the proposed drainage structures and the grading plan; 2. an erosion and sedimentation control plan; 3. related calculations and specifications, signed and stamped by the responsible civil engineer; and 4. soils report as required by Appendix Chapter 33, Section 3309.5 — Soils Engineering Report and Section 3309.6 — Engineering Geology Report.	At least 15 days prior to the start of site grading, the project owner shall submit the documents described above to the CBO for review and approval. In the next Monthly Compliance Report following the CBO's approval, the project owner shall FACILITY DESIGN 522 October 19, 1998 submit a written statement certifying that the documents have been approved by the CBO.
CIVIL-2	The resident engineer shall, if appropriate, stop all earthwork and construction in the affected areas when the responsible geotechnical engineer or civil engineer experienced and knowledgeable in the practice of soils engineering identifies unforeseen adverse soil or geologic conditions. The project owner shall submit modified plans, specifications and calculations to the CBO based on these new conditions. The project owner shall obtain approval from the CBO before resuming earthwork and construction in the affected area. [Section 104.2.4 — Stop orders.]	The project owner shall notify the CPM, within five days, when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within five days of the CBO's approval, the project owner shall provide to the CPM a copy of the CBO's approval to resume earthwork and construction in the affected areas.
CIVIL-3	The project owner shall perform inspections in accordance with Section 108 — Inspections, Chapter 17, Section 1701.6 — Continuous and periodic special inspection and Appendix Chapter 33, Section 3317 —Grading inspection. All plant site grading operations shall be subject to inspection by the CBO and the CPM. If, in the course of inspection, it is discovered that the work is not being done in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO, and the CPM. The project owner shall prepare a written report detailing all discrepancies and non-compliance items, and the proposed corrective action and send copies to the CBO and the CPM.	Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a non-conformance report (NCR), and the proposed corrective action. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs for the reporting month shall also be included in the following Monthly Compliance Report.
CIVIL-4	After completion of finished grading and erosion and sedimentation control and drainage facilities, the project owner shall obtain the CBO's approval of the final "as-graded" grading plans, and final "as-built" plans for the erosion and sedimentation control facilities. [Section 109 —Certificate of Occupancy]	Within 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) of the completion of the erosion and sediment control mitigation and drainage facilities, the project owner shall submit to the CBO the October 19, 1998 523 FACILITY DESIGN responsible civil engineer's signed statement that the installation of the facilities and all erosion control measures were completed in accordance with the final approved combined grading plans, and that the facilities are adequate for their intended purposes. The project owner shall submit a copy of this report to the CPM in the next Monthly Compliance Report.

STRUC-1	Prior to the start of any increment of construction, the project owner shall submit to the CBO for review and approval the applicable designs, plans and drawings, and a list of those project structures, components and major equipment items that will undergo dynamic structural analysis. Designs, plans and drawings shall be those for: 1. major project structures; 2. major foundations, equipment supports and anchorages; 3. large field fabricated tanks; 4. turbine/generator pedestal; and 5. switchyard structures. ***Protocol:*** The project owner shall: 1. obtain agreement with the CBO on the list of those structures, components and major equipment items to undergo dynamic structural analysis; 2. meet the pile design requirements of the 1995 CBC. Specifically, Section 1807 — General Requirements, Section 1808 — Specific Pile Requirements, and Section 1809 — Foundation Construction (in seismic zones 3 and 4). 3. obtain approval from the CBO for the final design plans, specifications, calculations, soils reports, and applicable quality control procedures. If there are conflicting requirements, the more stringent shall govern (i.e., highest loads, or lowest allowable stresses shall govern). All plans, calculations, and specifications for foundations that support structures shall be filed concurrently with the structure plans, calculations, and specifications, [Section 108.4 — Approval Required]; 4. submit to the CBO the required number of copies of the structural plans, specifications, calculations, and other required documents of the designated major structures at least 90 days prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation, [Section 106.4.2 — Retention of plans, Section 106.3.2 — Submittal documents.]; and 5. ensure that the final plans, calculations, and specifications clearly reflect the inclusion of approved criteria, assumptions, and FACILITY DESIGN 524 October 19, 1998 methods used to develop the design. The final designs, plans, calculations and specifications shall be signed and stamped by the responsible design engineer. [Section 106.3.4 — Architect or engineer of record.]	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of any increment of construction, the project owner shall submit to the CBO, with a copy to the CPM, the responsible design engineer's signed statement that the final design plans, specifications and calculations conform with all of the requirements set forth in the Commission's Decision. If the CBO discovers non-conformance with the stated requirements, the project owner shall resubmit the corrected plans to the CBO within 20 days of receipt of the non-conforming submittal, with a copy of the transmittal letter to the CPM. The project owner shall submit to the CPM a copy of a statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and are in conformance with the requirements set forth in the applicable LORS.
STRUC-2	The project owner shall submit to the CBO the required number of sets of the following: 1. concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters); 2. concrete pour sign-off sheets; 3. bolt torque inspection reports (including location of test, date, bolt size, and recorded torques); 4. field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number [ref: AWS]; and 5. reports covering other structure activities requiring special inspections shall be in accordance with Chapter 17, Section 1701— Special Inspections, Section 1701.5 — Type of Work (requiring special inspection), Section 1702 — Structural Observation and Section 1703 — Nondestructive Testing.	If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the October 19, 1998 525 FACILITY DESIGN discrepancies to the CBO, with a copy of the transmittal letter to the CPM. The NCR shall reference the condition(s) of certification and applicable CBC chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM. The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall, within five days, advise the CPM of the reason for disapproval, and the revised corrective action to obtain CBO's approval.
STRUC-3	The project owner shall submit to the CBO design changes to the final plans required by Chapter 1, Section 106.3.2 — Submittal documents, and 106.3.3 — Information on plans and specifications, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes, and shall give the CBO prior notice of the intended filing.	On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the Monthly Compliance Report, when the CBO has approved the revised plans.

STRUC-4	Tanks and vessels containing quantities of hazardous materials exceeding those amounts specified in Table 3E of Chapter 3, in the 1995 California Building code shall, at a minimum, be designed to comply with Occupancy Category 2 (Hazardous facilities). Table 16-K of Chapter 16, in the 1995 CBC which requires use of the following seismic design criteria: I = 1.25, I p = 1.5 and I w = 1.15.	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of installation of the tanks or vessels containing sufficient quantities of highly toxic or explosive substances that would be hazardous to the safety of the general public if released, the project owner shall submit to the CBO for review and approval, final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification. The project owner shall send copies of the CBO approvals of plan checks to the CPM in the following Monthly Compliance Report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance eport following completion of any inspection.
MECH-1	Prior to the start of any increment of piping construction, the project owner shall submit, for CBO review and approval, the proposed final design drawings, specifications and calculations for each plant piping FACILITY DESIGN 526 October 19, 1998 system (exclude: domestic water, refrigeration systems, and small bore piping, i.e., piping and tubing with a diameter equal to or less than two and one-half inches). The submittal shall also include the applicable QA/QC procedures. The project owner shall design and install all piping, other than domestic water, refrigeration, and small bore piping to the applicable edition of the CBC. Upon completion of construction of any piping system, the project owner shall request the CBO's inspection approval of said construction. [Section 106.3.2 — Submittal documents, Section 108.3 — Inspection Requests.] ***Protocol:*** The responsible mechanical engineer shall submit a signed and stamped statement to the CBO when: 1. the proposed final design plans, specifications, and calculations conform with all of the piping requirements set forth in the Commission Decision; and 2. all of the other piping systems, except domestic water, refrigeration systems, and small bore piping, have been designed, fabricated, and installed in accordance with all applicable ordinances, regulations, laws and industry standards, including, as applicable: -- American National Standards Institute (ANSI) B31.1 (Power Piping Code); -- ANSI B31.2 (Fuel Gas Piping Code); -- ANSI B31.3 as applicable (Chemical Plant and Petroleum Refinery Piping Code); -- ANSI B31.8 (Gas Transmission and Distribution Piping Code); and -- Specific City/County code. The CBO may require the project owner, as necessary, to employ special inspectors to report directly to the CBO to monitor shop fabrication or equipment installation. [Section 104.2.2 — Deputies.]	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of any increment of piping construction, the project owner shall submit to the CBO for approval, with a copy of the transmittal letter to the CPM, the proposed final design plans, specifications, calculations and quality control procedures for that increment of construction of piping systems, including a copy of the signed and stamped engineer's certification of conformance with the Commission Decision. The project owner shall transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.
MECH-2	For all pressure vessels installed in the plant, the project owner shall submit to the CBO and California Occupational Safety and Health Administration (Cal-OSHA), prior to operation, the code certification papers and other documents required by the applicable LORS. Upon completion of the installation of any pressure vessel, the project owner shall request the appropriate CBO and/or Cal-OSHA inspection of said installation. [Section 108.3 — Inspection Requests.] ***Protocol:*** The project owner shall: 1. ensure that all boilers and fired and unfired pressure vessels are designed, fabricated and installed in accordance with the appropriate section of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and 2. have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications, and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of on-site fabrication or installation of any pressure vessel, the project owner shall submit to the CBO for review and approval, final design plans, specifications, and calculations, including a copy of the signed and stamped engineer's certification, with a copy of the transmittal letter to the CPM. The project owner shall send copies of the CBO plan check approvals to the CPM in the following Monthly Compliance Report. The project owner shall also transmit a copy of the CBO's and/or Cal-OSHA inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.

MECH-3	Prior to the start of construction of any heating, ventilating, air conditioning (HVAC) or refrigeration system, the project owner shall submit to the CBO for review and approval the design plans, specifications, calculations, and quality control procedures for that system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets. ***Protocol:*** The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the applicable edition of the CBC. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of said construction. The final plans, FACILITY DESIGN 528 October 19, 1998 specifications and calculations shall include approved criteria, assumptions, and methods used to develop the design. In addition, the responsible mechanical engineer shall sign and stamp all plans, drawings, and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications and calculations conform with the applicable LORS. [Section 108.7 — Other Inspections, Section 106.3.4 — Architect or engineer of record.]	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction of any HVAC or refrigeration system, the project owner shall submit to the CBO the required HVAC and refrigeration calculations, plans, and specifications, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the applicable edition of the CBC, with a copy of the transmittal letter to the CPM. The project owner shall send copies of CBO comments and approvals to the CPM in the next Monthly Compliance Report. The project owner shall transmit a copy of the CBO's inspection approvals to the CPM in the Monthly Compliance Report following completion of any inspection.
MECH-4	Prior to the start of each increment of plumbing construction, the project owner shall submit for CBO's approval the final design plans, specifications, calculations, and QA/QC procedures for all plumbing systems, potable water systems, drainage systems (including sanitary drain and waste), toilet rooms, building energy conservation systems, and temperature control and ventilation systems, including water and sewer connection permits issued by the local agency. Upon completion of any increment of construction, the project owner shall request the CBO's inspection approval of said construction. [Section 108.3 — Inspection Requests, Section 108.4 — Approval Required.] ***Protocol:*** The project owner shall design, fabricate, and install: 1. plumbing, potable water, all drainage systems, toilet rooms, in accordance with Title 24, California Code of Regulations, Division 5, Part 5, and the California Plumbing Code (or other relevant section(s) of the currently adopted California Plumbing Code and Title 24, california Code of Regulations); and 2. building energy conservation systems and temperature control and ventilation systems in accordance with Title 24, California Code of Regulations, Division 5, Chapter 2-53, Part 2. The final plans, specifications, and calculations shall clearly reflect the inclusion of approved criteria, assumptions, and methods used to develop the design. In addition, the responsible mechanical engineer shall stamp and sign all plans, October 19, 1998 529 FACILITY DESIGN drawings, and calculations and submit a signed statement to the CBO that the proposed final design plans, specifications, and calculations conform with all of the requirements set forth in the Commission Decision.	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of construction of any of the above systems, the project owner shall submit to the CBO the final design plans, specifications and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the applicable edition of the CBC, and send the CPM a copy of the transmittal letter in the next Monthly Compliance Report. The project owner shall transmit a copy of the CBO's inspection approvals to the CPM in the next Monthly Compliance Report following completion of that increment of construction.
ELEC-1	For the 13.8 kV and lower systems, the project owner shall not begin any increment of electrical construction until plans for that increment have been approved by the CBO. These plans, together with design changes and design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. [Section 108.4 — Approval Required, and Section 108.3 Inspection Requests.]	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of electrical construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations, including a copy of the signed and stamped statement from the responsible electrical engineer attesting compliance with the applicable LORS, and send the CPM a copy of the transmittal letter in the next Monthly Compliance Report. The following activities shall be reported in the Monthly Compliance Report: 1. receipt or delay of major electrical equipment; 2. testing or energization of major electrical equipment; and 3. The number of electrical drawings approved, submitted for approval, and still to be submitted.

ELEC-2	The project owner shall submit to the CBO the required number of copies of items A and B for review and approval and one copy of item C: [Section 106.3.2 — Submittal documents.] A. Final plant design plans to include: 1. one-line diagrams for the 13.8 kV, 4.16 kV and 480 V systems; FACILITY DESIGN 530 October 19, 1998 2. system grounding drawings; 3. other plans as required by the CBO. B. Final plant calculations to establish: 1. short-circuit ratings of plant equipment; 2. ampacity of feeder cables; 3. voltage drop in feeder cables; 4. system grounding requirements; 5. coordination study calculations for fuses, circuit breakers and protective relay settings for the 13.8 kV, 4.16 kV and 480 V systems; 6. system grounding requirements; 7. lighting energy calculations; and 8. other reasonable calculations as customarily required by the CBO. C. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Commission Decision.	At least 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) prior to the start of each increment of electrical equipment installation, the project owner shall submit to the CBO for review and approval the final design plans, specifications and calculations, for the items enumerated above, including a copy of the signed and stamped statement from the responsible electrical engineer certifying compliance with the applicable LORS. The project owner shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.
POWERPLANT RELIABILITY (NO CONDITIONS)		
POWERPLANT EFFICIENCY (NO CONDITIONS)		
TRANSMISSION SYSTEM ENGINEERING		
TSE-1	TSE-1 The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to requirements 1a through 1e listed below. The substitution of CPM approved "equivalent" equipment and equivalent switchyard configurations is acceptable. a. The project 230 kilovolt project switchyard shall include a four circuit breaker ring bus with breaker ratings of 40,000 amperes (interrupting) and ring bus, switches, breakers and buswork rated at 2,000 ampere continuous. b. An approximately 4 mile double circuit configuration line operated as a single circuit 230 kilovolt line using steel pole construction with conductors sized at a minimum of 1272 thousand circular mill Aluminum Conductor Steel Reinforced shall be constructed to the O'Banion South switching station site. c. Termination facilities at the Sutter Bypass 230 kilovolt switching station, the power plant switchyard, and transmission line shall comply with applicable Western interconnection standards (CPUC General Order 95 and National Electric Safety Code). Bus work, switches and breakers at the Sutter Bypass switching station shall be rated 3000 ampere continuous with breaker interrupting ratings of 40,000 ampere. d. Outlet line crossings shall be coordinated with the transmission line owner/operator and comply with the owner's standards. e. A direct transfer tripping scheme (remedial action scheme) which shuts down one 175 megawatt, two 175 megawatt units, or reduces the plant output upon loss of one of the Sutter Bypass switching station to Elverta lines shall be provided and activated where appropriate.	At least 30 days prior to start of construction of transmission facilities, the project owner shall submit for approval to the CPM electrical one-line diagrams signed and sealed by a registered professional electrical engineer in responsible charge, a route map, and an engineering description of equipment and the configurations covered by requirements 1a through 1e above. Substitution of equipment and switchyard configurations shall be identified and justified by the project owner for CPM approval.
TSE-2	The project owner shall inform the CPM of any impending changes which may not conform to the requirements of 1a through 1e of TSE-1, and request CPM approval to implement such changes. A detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change shall accompany the request. Construction involving changed equipment or switchyard configurations shall not begin without prior written approval of the changes by the CPM.	At least 30 days prior to construction of transmission facilities, the project owner shall inform the CPM of any impending changes which may not conform to requirements 1a through 1e of TSE-1 and request CPM approval to implement such changes.

TSE-3	The project owner shall be responsible for the inspection of the transmission facilities during and after project construction and any subsequent CPM approved changes thereto, to ensure conformance with CPUC General Order 95 and Western's interconnection standards and these Conditions. In case of non-conformance, the project owner shall inform the CPM in writing of such non-conformance and describe the corrective actions to be taken.	Within 60 days after synchronization of the project, the project owner shall transmit to the CPM an engineering description(s), one-line drawings of the "as-built" facilities signed and sealed by a registered electrical engineer in responsible charge. A statement attesting to conformance with CPUC General Order 95, Western's interconnection standards and these conditions shall be concurrently provided. Within 10 days of any non-conformance, the project owner shall submit a written notification to the CPM as described in this Condition.
TRANSMISSION LINE SAFETY AND NUISANCE		
TLSN-1	The project owner shall construct the proposed transmission line according to the requirements of GO-95 and Title 8, Section 2700 et seq. Of the California Code of Regulations.	Thirty days before start of transmission line construction, the project owner shall submit to the Commission's Compliance Project Manager (CPM) a letter signed by a California registered electrical engineer affirming that the transmission line will be constructed according the requirements of GO-95 and Title 8, Section 2700 et seq. of the California Code of Regulations.
TLSN-2	The project owner shall make every reasonable effort to identify and correct, on a case-specific basis, all complaints of interference with radio or television signals from operation of the line and related facilities. In addition to any transmission repairs, the relevant corrective actions should include, but shall not be limited to, adjusting or modifying receivers, adjusting or repairing, replacing or adding antennas, antenna signal amplifiers, filters, or lead-in cables. The project owner shall maintain written records, for a period of five years, of all complaints of radio or television interference attributable to operation together with the corrective action taken in response to each complaint. All complaints shall be recorded to include notations on the corrective action taken. Complaints not leading to a specific action or for which there was no resolution should be noted and explained. The record shall be signed by the project owner and also the complainant, if possible, to indicate concurrence with the corrective action or agreement with the justification for a lack of action.	All reports of line-related complaints shall be summarized and included in the Annual Compliance Report to the CPM.
TLSN-3	The project owner shall engage a qualified consultant to measure the strengths of the line electric and magnetic fields before beginning construction and after the line is energized. Measurements should be made at appropriate points along the route to allow verification of design assumptions relative to field strengths. The areas to be measured should include the Sutter Bypass switching station, the on-site switchyard and any residences near the right-of-way.	The project owner shall file a copy of the first set of pre-project measurements with the CPM at least 30 days before the start of construction. The post-project measurements shall be filed within 30 days after the day the line was energized.
TLSN-4	The project owner shall ensure that the transmission line right-of-way is kept free of combustible material as required under the provisions of section 4292 of the Public Resources Code and Section 1250 of the California Code of Regulations.	The project owner shall provide a summary of inspection results and any fire prevention activities along the right-of-way in the annual compliance report.
TLSN-5	The project owner shall send a letter to all owners of property within or adjacent to the right-of-way at least 60 days prior to first transmission of electricity. ***Protocol:*** The letter shall include the following: ▪ A discussion of the nature and operation of a transmission line. ▪ A discussion of the project owner's responsibility for grounding existing fences, gates, and other large permanent chargeable objects within the right-of-way regardless of ownership. ▪ A discussion of the property owner's responsibility to notify the project whenever the property owner adds or installs a metallic object which would require grounding as noted above. ▪ A statement recommending against fueling motor vehicles or other mechanical equipment underneath the line.	The project owner shall submit the proposed letter to the CPM for review and approval 30 days prior to mailing to the property owners and shall maintain a record of correspondence (notification and response) related to this requirement in a compliance file. The project owner shall notify the CPM in the first Monthly Compliance Report that letters have been mailed and that copies are on file.

TLSN-6	The project owner shall ensure the grounding of any ungrounded permanent metallic objects within the right-of-way, regardless of ownership. Such objects shall include fences, gates, and other large objects. These objects shall be grounded according to procedures specified in the National Electrical Safety Code. In the event of a refusal by the property owner to permit such grounding, the project owner shall so notify the CPM. Such notification shall include, when possible, the owner's written objection. Upon receipt of such notice, the CPM may waive the requirement for grounding the object involved.	At least 10 days before the line is energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition.
FACILITY CLOSURE		
CLOSUR E-1	Prior to first energizing of the project, the project owner shall submit a contingency plan for dealing with an unplanned and/or sudden facility closure or interruption of operations other than those required for normal maintenance. The contingency plan shall provide for the following: 1. taking immediate steps to secure the facility from trespassing or encroachment; 2. removal of hazardous materials; 3. removal of hazardous wastes for closures more than 90 days in duration; 4. draining of all chemicals from storage tanks and other equipment; 5. the safe shutdown of all equipment; and 6. other necessary or prudent measures.	At least 90 days prior to first energizing the project, the project owner shall submit to the CPM and to the Assistant Director of Sutter County Community Services Department, Fire and Emergency Services for review and approval a contingency plan identifying the steps that will be taken in case of an unplanned permanent or temporary facility closure.
CLOSUR E-2	In the event of an unplanned and/or sudden facility closure or interruption of operations, the project owner shall notify the Energy Commission CPM, as well as other responsible agencies, by telephone or fax within 24 hours. The project owner shall take all necessary steps to ensure that there is no immediate danger to health and safety to or the environment from materials on the site as provided in the contingency plan described in condition CLOSURE-1. If the CPM determines that the closure is likely to be permanent or for a duration of more than twelve months, then a plan consistent with the Protocol of Condition CLOSURE-3 below shall be submitted to the CPM within 90 days of the CPM's determination (or other mutually agreed upon period of time).	The project owner shall maintain on-site the contingency plan required by Condition CLOSURE-1 identifying the steps that will be taken in case of an unplanned permanent or temporary facility closure. Within seven days of any unplanned and/or sudden facility closure or interruption of operations, the project owner shall submit a letter to the CPM describing the situation, the expected duration, and any planned actions to protect health, safety, and the environment.
CLOSUR E-3	In the event of a planned facility closure, at least 12 months (or other mutually agreed-upon period of time) prior to commencing facility closure activities, the project owner shall file a proposed facility closure plan with the Energy Commission for review and approval. ***Protocol:*** 1. The plan shall: a. Identify and discuss the proposed facility closure activities, mitigation measures, and schedule for the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project; b. Identify any facilities or equipment intended to remain on site after closure and the reason therefore, including any potential future use; and c. Address conformance of the plan with all applicable laws, ordinances, regulations standards, Local/regional plans in existence at the time of facility closure, and applicable Conditions of Certification. 2. Prior to submittal of the facility closure plan, a meeting shall be held between the project owner and the Commission CPM for the purpose of discussing the specific contents of the plan. 3. In the event that significant issues are associated with the plan's approval, or the desires of local officials or interested parties are inconsistent with the plan, the CPM shall hold one or more workshops and/or the Commission may hold public hearings as part of its approval procedure. 4. The project owner shall not commence facility closure activities, with the exception of measures to eliminate any immediate threats to health and safety or the environment, until Commission approval of the facility closure plan is obtained, and the project owner shall comply with any requirements the Commission may incorporate as a condition of facility closure plan approval.	The project owner shall file 125 copies (or a mutually agreed upon lesser number) of the proposed facility closure plan with the Commission. At least six months (or other mutually agreed-upon time) prior to commencing facility closure, the project owner shall participate in a workshop, if the CPM determines that a workshop is necessary, to allow the Sutter County Planning Department and other interested agencies and parties to comment on the proposed closure plan and determine if there are any changes or additional measures needed in the plan.
COMPLIANCE MONITORING (NO CONDITIONS)		
GENERAL CONDITIONS (NO CONDITIONS)		

Table AQ-33 (16): Maximum Hourly Emission Rates (lbs./hr)							
Pollutant	CTG	CTG + Duct Burner	CTG + Duct Burner + Steam Injection	CTG + Steam Injection	Hot Start-up	Cold Start-up	Shut-down
NOx	16.8	18.2	19.1	17.7	170	175	12.1
CO	16.7	20.1	34.3	30.9	902	838	12.6
VOC	1.5	3.5	3.51	1.51	1.1	1.1	1.1
SO2	3.7	3.71	4.02	4.01	2.7	2.7	2.7
PM10	9.0 0	11.5.	11.5	9.0	9.00	9.0	9.0

Table AQ-33 (17) Maximum Project Daily Emissions (lbs./day)		
	Total Emission Per CTG	Calpine Maximum SPP Daily Emissions
NOx	909	1817
CO	3264	6528
VOC	79	158
SO2	90	179
PM10	271	54

Table AQ-33 (19) Maximum Calendar Year Emissions (tons/yr.)		
	Total Emission Per CTG	Calpine Annual SPP Emission
NOx	102	205.86
CO	242	483.18
VOC	11.9	24.41
SO2	15.7	31.5
PM10	46.2	92.5

Table AQ-33 (18) Maximum Quarterly Emissions				
	January-March lb./quarter	April-June lb./quarter	July-Sept. lb./quarter	October-December lb./quarter
NOx	102,500	102,500	102,500	102,500
CO	241,600	241,600	241,600	241,600
VOC	11,850	11,850	11,850	11,850
SO2	15,750	15,750	15,750	15,750
PM10	46,200	46,200	46,200	46,200

Table AQ-42 Certificates for Air Emissions						
	January-March (pounds)	April-June (pounds)	July-September (pounds)	October-December (pounds)	Total ERCs & Offsets	
					Total Pounds	Total Tons
Required NOx	106,950	106,950	106,950	106,950	427,800	213.9
Required VOC	69,300	69,300	69,300	69,300	277,200	138.6
Required PM10	66,000	66,000	66,000	66,000	264,000	132.0
These ERCs have not been discounted to reflect the appropriate offset distance ration calculations						