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**DONALD VON RAESFELD
(02-AFC-03C)**

**CONDITIONS OF
CERTIFICATION
As Amended**

(Updated December 3, 2019)

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DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
AIR QUALITY CONDITIONS OF CERTIFICATION

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Staff Approved Project Change	2019-10-17	230260	AQ-46 thru AQ-52

CONSTRUCTION AND COMMISSIONING CONDITIONS OF CERTIFICATION

AQ-C1 The project owner shall designate and retain an on-site Air Quality Construction Mitigation Manager (AQCM) who shall be responsible for maintaining compliance with conditions **AQ-C2** through **AQ-C3** for the entire project site and linear facility construction.

The on-site AQCM may delegate responsibilities identified in Conditions **AQ-C1** through **AQ-C3** to one or more air quality construction mitigation monitors. The on-site AQCM shall have full access to areas of construction of the project site and linear facilities, and shall have the authority to appeal to the CPM to have the CPM stop any or all construction activities as warranted by applicable construction mitigation conditions.

The AQCM may have other responsibilities in addition to those described in this condition. The on-site AQCM shall not be terminated without written consent from the CPM.

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM, for approval, the name, contact information and qualifications for the on-site AQCM and air quality construction mitigation monitors.

AQ-C2 The project owner shall provide a construction mitigation plan, for approval, which shows the steps that will be taken, and reporting requirements, to ensure compliance with conditions **AQ-C3**.

Verification: At least 30 days prior to start any ground disturbance, the project owner shall submit to the CPM, for approval, the construction mitigation plan. The CPM will notify the project owner of any necessary modifications to the plan within 15 days from the date of receipt. Otherwise, the plan shall be deemed approved.

AQ-C3 The on-site AQCM shall submit to the CPM, in the monthly compliance report, a construction mitigation report that demonstrates compliance with the following mitigation measures for the purposes of preventing fugitive dust plumes from leaving the project site and controlling other construction-related emissions:

- a. All unpaved roads and disturbed areas in the project and linear construction sites shall be watered every four hours of construction

activities, or as necessary to prevent fugitive dust plumes from leaving the project site. The frequency of watering can be reduced or eliminated during periods of precipitation.

- b. No vehicle shall exceed 10 miles per hour within the construction site.
- c. The construction site entrances shall be posted with visible speed limit signs.
- d. All vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.
- e. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- f. All unpaved entrances to the construction site shall be graveled or treated with dust soil stabilization compounds.
- g. All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM.
- h. Construction areas adjacent to any paved roadway shall be provided with sandbags or other measures as specified in the Storm Water Pollution Prevention Plan, to prevent run-off to roadways.
- i. All paved roads within the construction site shall be swept as necessary to prevent the accumulation of dirt and debris.
- j. At least the first 500 feet of any public roadway exiting from the construction site shall be swept twice daily or as necessary to prevent the accumulation of dirt and debris.
- k. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or be treated with appropriate dust suppressant compounds.
- l. All vehicles that are used to transport solid bulk material and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- m. Wind erosion control techniques, such as wind breaks, water, chemical dust suppressants and vegetation, shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.
- n. All diesel-fueled engines used in the construction of the facility shall be fueled only with ultra-low sulfur diesel, which contains no more than 15 ppm sulfur.

- o. All large construction diesel engines, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 1 ARB/U.S. EPA certified standards for off-road equipment.
- p. All large construction diesel engines, which have a rating of 50 hp or more that do not have an U.S. EPA Tier 1 particulate standard (50 to 175 hp engines) and do not meet Tier 2 particulate standards, shall be equipped with catalyzed diesel particulate filters (soot filters), unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types.
- q. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM that shows the engine meets the conditions **AQ-C3(o)** and **AQ-C3(p)** above.

Observations of visible dust plumes would indicate that the existing mitigation measures are not resulting in effective mitigation. The AQCMM shall implement the following procedures for additional mitigation measures if the AQCMM determines that the existing mitigation measures are not resulting in effective mitigation:

- r. The AQCMM shall direct more aggressive application of the existing mitigation methods within 15 minutes of making such a determination.
- s. The AQCMM shall direct implementation of additional methods of dust suppression if step a) specified above, fails to result in adequate mitigation within 30 minutes of the original determination.
- t. The AQCMM shall direct a temporary shutdown of the source of the emissions if step b) specified above fails to result in adequate mitigation within one hour of the original determination. The activity shall not restart until one full hour after the shutdown. The owner/operator may appeal to the CPM any directive from the AQCMM to shutdown a source, provided that the shutdown shall go into effect within one hour of the original determination unless overruled by the CPM before that time.

Verification: In the MCR, the project owner shall provide the CPM a copy of the construction mitigation report and any diesel fuel purchased records, which clearly demonstrates compliance with condition **AQ-C3**.

AQ-C4 The project owner shall submit to the CPM for review and approval any modification proposed by either the project owner or issuing agency to any project air permit.

Verification: The project owner shall submit any proposed air permit modification to the CPM within five working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-C5 The project owner shall submit a plan for a fireplace retrofit/wood stove replacement program to the CPM for approval. The plan must be sufficient to secure 16.38 tons per year of PM₁₀ based on the project emissions during the fall and winter quarters of each year. The plan shall provide the following elements:

- a. Provisions for a replacement fund to be made available on a first-come, first-serve basis to finance a five-year voluntary wood stove replacement/fireplace retrofit program. The replacement fund shall pay for the retrofit/replacement costs of current non-U.S. EPA certified fireplaces and wood stoves (up to a maximum of \$1,250 for each retrofit/replacement). The fund shall be capable of being drawn upon in any year of the five year program and as allowed by conditions of certification until the fund is depleted.
- b. A list of approved retailers and professional, licensed installers. Each resident participating in the retrofit/replacement program would only do business with listed retailers or installers. Payments shall only be made to vendors or contractors who agree to participate in the program and who submit certification that the retrofit/replacement is permanent (by permanent removal of the wood stove doors and proper recycling of the old stove) and conforms to program requirements.
- c. A schedule for submission to the CPM of quarterly status reports on the program, the status of reimbursements, and remaining funds available. In addition, the fund shall be audited annually.
- d. A description of eligibility requirements, including that, for the first three years of the program, homes and businesses located within a 15-mile radius of the proposed facility will be eligible to participate in the program. Homes and businesses within a 25-mile radius of the PPP facility would be eligible to participate in the fourth and fifth years if there are remaining funds.
- e. A detailed schedule of deliverables.

Verification: No later than 60 days prior to first turbine ignition, the project owner shall provide the CPM, for approval, a copy of the wood stove replacement program, and a copy of the agreement document with the BAAQMD that describes the roles and responsibilities of the Project Owner and the BAAQMD in the wood stove replacement program.

AQ-C6 The following ERC Certificates, and the amounts specified shall be surrendered per the requirements of Condition **AQ-41**:

43.3 tons NOx from ERC Certificate 861,

11.2 tons of POC total from ERC Certificate 860 and ERC Certificate 865.

Verification: At least 60 days prior to construction, the project owner/operator must surrender the ERC certificates identified above to the District and provide copies to the CPM.

The following Conditions of Certification are based upon conditions mandated by the Bay Area Air Quality Management District, which applies the conditions to each emission source of the project. Each emission source receives a separate permit number, S-1 through S-5. These are:

- S-1** Combustion Gas Turbine #1, General Electric LM6000 PC SPRINT; 473.7 MM BTU per hour, equipped with water injection, abated by A-1 SCR and A-2 Oxidation Catalyst
- S-2** Heat Recovery Steam Generator #1, equipped with low emission Duct Burners, 136.9 MM BTU per hour, abated by A-1 SCR and A-2 Oxidation Catalyst
- S-3** Combustion Gas Turbine #2, General Electric LM6000 PC SPRINT; 473.7 MM BTU per hour, equipped with water injection, abated by A-3 SCR and A-4 Oxidation Catalyst
- S-4** Heat Recovery Steam Generator #2, equipped with low emission Duct Burners, 136.9MM BTU per hour, abated by A-3 SCR and A-4 Oxidation Catalyst
- S-5** Cooling Tower, 3-Cell, 34,980 gallons per minute capacity, equipped with High Efficiency Drift Eliminators

Conditions **AQ-1** through **AQ-12** shall only apply during the commissioning period. Unless otherwise indicated, Conditions **AQ-13** through **AQ-47** shall apply after the commissioning period has ended. The applicable District rule, regulation or plan is cited in parenthesis at the end of each condition of certification, just before the verification paragraph. For definitions of the technical terms in Conditions **AQ-13** through **AQ-47**, the reader is referred to the BAAQMD's Preliminary Determination of Compliance for the Pico Power Project.

CONDITIONS FOR THE COMMISSIONING PERIOD

- AQ-1** The Owner/Operator of the Pico Power Plant shall minimize emissions of carbon monoxide and nitrogen oxides from S-1, S-3 Gas Turbines and S-2, S-4 Heat Recovery Steam Generators (HRSGs) to the maximum extent possible during the commissioning period.

Verification: The project Owner/Operator shall propose a schedule of compliance with this Condition of Certification in the Commissioning Plan required by Condition **AQ-5** and document continuing compliance with this Condition of Certification in each Monthly Emissions Report required by Condition **AQ-11**.

- AQ-2** At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Owner/Operator shall tune the S-1 & S-3 Gas Turbine combustors and S-2 & S-4 Heat Recovery Steam Generator duct burners to minimize the emissions of carbon monoxide and nitrogen oxides.

Verification: The project Owner/Operator shall propose a schedule of compliance with this Condition of Certification in the Commissioning Plan required by Condition **AQ-5** and document continuing compliance with this Condition of Certification in each Monthly Emissions Report required by Condition **AQ-11**.

AQ-3 At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the Owner/Operator shall install, adjust, and operate the A-1 & A-3 SCR Systems and A-2 & A-4 Oxidation Catalysts to minimize the emissions of carbon monoxide and nitrogen oxides from S-1, S-3 Gas Turbines, S-2, S-4 Heat Recovery Steam Generators.

Verification: The project Owner/Operator shall propose a schedule of compliance with this Condition of Certification in the Commissioning Plan required by Condition **AQ-5** and document continuing compliance with this Condition of Certification in each Monthly Emissions Report required by Condition **AQ-11**.

AQ-4 Coincident with the steady-state operation of A-1 & A-3 SCR Systems and A-2 & A-4 Oxidation Catalysts pursuant to Conditions **AQ-3**, **AQ-8**, and **AQ-9** the Owner/Operator shall operate the Gas Turbines (S-1 & S-3) and the HRSGs (S-2 & S-4) in such a manner as to comply with the NO_x and CO emission limitations specified in Conditions

Verification: Coincident with the as-designed operation of A-1 and A-2 SCR Systems, pursuant to Conditions **AQ-3**, **AQ-10**, **AQ-11**, and **AQ-12**, the Gas Turbines (S-1 and S-3) and the HRSGs (S-2 and S-4) the Owner/Operator shall operate the facility in a manner such that comply with the NO_x and CO emission limitations specified in Conditions **AQ-20(a)** through **AQ-20(d)**.

AQ-5 The Owner/Operator of Pico Power Plant shall submit a plan to the District Permit Services Division and the CEC Compliance Project Manager (CPM) at least four weeks prior to first firing of S-1 or S-3 Gas Turbines describing the procedures to be followed during the commissioning of the turbines, HRSGs, and steam turbine.

The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the gas turbine combustors, water injection system, and the duct burners associated with the HRSGs; the installation and operation of the required emission control systems; the installation, calibration, and testing of the CO and NO_x continuous emission monitors; and any activities requiring the firing of the Gas Turbines (S-1 & S-3), HRSGs (S-2 & S-4), without abatement by their respective SCR Systems (A-1 & A-3) and/or Oxidation Catalysts (A-2 & A-4).

The Owner/Operator shall not fire any of the Gas Turbines (S-1 & S-3) sooner than 28 days after the District receives the commissioning plan.

Verification: The project Owner/Operator shall submit a Commissioning Plan to the District Permit Services Division and the CPM for approval at least four (4) weeks prior to first fire of S-1, S-2, S-3 and S-4.

AQ-6 During the commissioning period, the Owner/Operator of Pico Power Plant shall demonstrate compliance with Conditions **AQ-10** and **AQ-11** through the

use of properly operated and maintained continuous emission monitors and data recorders for the following parameters:

firing hours

fuel flow rates

stack gas nitrogen oxide emission concentrations,

stack gas carbon monoxide emission concentrations

stack gas oxygen concentrations.

The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the Gas Turbines (S-1 & S-3), and HRSGs (S-2 & S-4). The Owner/Operator shall use District-approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NO_x and CO emission concentrations, summarized for each clock hour and each calendar day. The Owner/Operator shall retain records on site for at least 5 years from the date of entry and make such records available to District personnel upon request.

Verification: The project Owner/Operator shall propose a schedule of compliance with this Condition of Certification in the Commissioning Plan required by Condition **AQ-5** and document continuing compliance with this Condition of Certification in each Monthly Emissions Report required by Condition **AQ-11**.

AQ-7 The Owner/Operator shall install, calibrate, and operate the District-approved continuous monitors specified in Condition **AQ-6** prior to first firing of the Gas Turbines (S-1 & S-3), and Heat Recovery Steam Generators (S-2 & S-4).

After first firing of the gas turbines, the Owner/Operator shall adjust the detection range of these continuous emission monitors as necessary to accurately measure the resulting range of CO and NO_x emission concentrations. The type, specifications, and location of these monitors shall be subject to District review and approval.

Verification: The project Owner/Operator shall notify the District and CPM of the date of expected first fire at least 30 days prior to first fire and shall make the project site available for inspection if desired by either the District or CPM.

The project Owner/Operator shall propose a schedule of compliance with this Condition of Certification in the Commissioning Plan required by Condition **AQ-5** and document continuing compliance with this Condition of Certification in each Monthly Emissions Report required by Condition **AQ-11**.

AQ-8 The Owner/Operator shall not fire the S-1 Gas Turbine and S-2 Heat Recovery Steam Generator without abatement of nitrogen oxide emissions by A- 1 SCR System and/or abatement of carbon monoxide emissions by A-2 Oxidation Catalyst for more than 300 hours during the commissioning period. Such operation of S-1 Gas Turbine and S-2 HRSG without abatement shall

be limited to discrete commissioning activities that can only be properly executed without the SCR system and/or oxidation catalyst in place.

Upon completion of these activities, the Owner/Operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 300 firing hours without abatement shall expire.

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification in the Monthly Emissions Report required by Condition **AQ-11**.

AQ-9 The Owner/Operator shall not fire the S-3 Gas Turbine and S-4 Heat Recovery Steam Generator without abatement of nitrogen oxide emissions by A-3 SCR System and/or abatement of carbon monoxide emissions by A-4 Oxidation Catalyst for more than 300 hours during the commissioning period. Such operation of S-3 Gas Turbine and S-4 HRSG without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system and/or oxidation catalyst in place.

Upon completion of these activities, the Owner/Operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 300 firing hours without abatement shall expire.

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification in the Monthly Emissions Report required by Condition **AQ-11**.

AQ-10 The total mass emissions of nitrogen oxides, carbon monoxide, precursor organic compounds, PM₁₀, and sulfur dioxide that are emitted by the Gas Turbines (S-1 & S-3) and Heat Recovery Steam Generators (S-2 & S-4) during the commissioning period shall accrue towards the consecutive 12-month emission limitations specified in Condition **AQ-23**.

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification in the Monthly Emissions Report required by Condition **AQ-11**.

AQ-11 The Owner/Operator shall not operate the Gas Turbines (S-1 & S-3) and Heat Recovery Steam Generators (S-2 & S-4) in a manner such that the combined pollutant emissions from these sources will exceed the following limits during the commissioning period. These emission limits shall include emissions resulting from the startup and shutdown of the Gas Turbines (S-1 & S-3).

NO _x (as NO ₂)	358.9 pounds per calendar day	18 pounds per hour
CO	377.9 pounds per calendar day	45 pounds per hour
POC (as CH ₄)	71.9 pounds per calendar day	
PM ₁₀	197.8 pounds per calendar day	
SO ₂	18.2 pounds per calendar day	

Verification: During the Commissioning Period, as defined in the district FDOC, the project Owner/Operator shall submit to the CPM for approval, a Monthly Emissions Report that includes, but is not limited to, fuel use, turbine operation, post combustion control operation, ammonia use and CEM readings on an hourly and daily basis.

The Monthly Emissions Report for each month must be submitted by the 15th (or the following Monday if the 15th is a Saturday or Sunday) of the following month.

AQ-12 Prior to the end of the Commissioning Period, the Owner/Operator of the Pico Power Plant shall conduct a District and CEC approved source test using external continuous emission monitors to determine compliance with the limitations specified in Condition **AQ-21**.

The source test shall determine NO_x, CO, and POC emissions during startup and shutdown of the gas turbines. The POC emissions shall be analyzed for methane and ethane to account for the presence of unburned natural gas. The source test shall include a minimum of three startup and three shutdown periods. Thirty working days before the execution of the source tests, the Owner/Operator shall submit to the District and the CEC Compliance Project Manager (CPM) a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CEC CPM will notify the Owner/Operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved.

The Owner/Operator shall incorporate the District and CEC CPM comments into the test plan. The Owner/Operator shall notify the District and the CEC CPM within seven (7) working days prior to the planned source testing date. Source test results shall be submitted to the District and the CEC CPM within 60 days of the source testing date.

Verification: No later than 20 working days before the execution of the source tests, the Owner/Operator shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CPM will notify the Owner/Operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District and CPM comments into the test plan.

The Owner/Operator shall notify the District and the CPM within 7 working days prior to the planned source testing date.

Source test results shall be submitted to the District and the CPM within 30 days of the source testing date.

CONDITIONS FOR THE GAS TURBINES (S-1 & S-3) AND THE HEAT RECOVERY STEAM GENERATORS (HRSGs; S-2 & S-4)

AQ-13 The Owner/Operator shall fire the Gas Turbines (S-1 & S-3) and HRSG Duct Burners (S-2 & S-4) exclusively with natural gas. (BACT for SO₂ and PM₁₀)

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-14 The Owner/Operator shall not operate the units such that the combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) exceeds 610.6 MM BTU (HHV) per hour, averaged over any rolling 3-hour period. (BACT and Cumulative Increase)

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-15 The Owner/Operator shall not operate the units such that the combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) exceeds 13,559.2 MM BTU (HHV) per calendar day. (BACT and Cumulative Increase)

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-16 The Owner/Operator shall not operate the units such that the combined cumulative heat input rate for the Gas Turbines (S-1 & S-3) and the HRSGs (S-2 & S-4) exceeds 8,682,544 MM BTU (HHV) per year. (Offsets and Cumulative Increase)

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-17 The Owner/Operator shall not fire the HRSG duct burners (S-2 & S-4) unless its associated Gas Turbine (S-1 & S-3 respectively) is in operation.

Verification: The project Owner/Operator shall make the project site available for inspection at any time by representatives of the District, ARB, U.S. EPA and CEC.

AQ-18 The Owner/Operator shall ensure that the S-1 Gas Turbine and S-2 HRSG are abated by the properly operated and properly maintained A-1 Selective Catalytic Reduction (SCR) System whenever fuel is combusted at those sources and the A-1 SCR catalyst bed has reached minimum operating temperature. (BACT for NO_x)

Verification: The project Owner/Operator shall make the project site available for inspection at any time by representatives of the District, ARB, U.S. EPA and CEC.

AQ-19 The Owner/Operator shall ensure that the S-3 Gas Turbine and S-4 HRSG are abated by the properly operated and properly maintained A-3 Selective Catalytic Reduction (SCR) System whenever fuel is combusted at those sources and the A-3 SCR catalyst bed has reached minimum operating temperature. (BACT for NO_x)

Verification: The project Owner/Operator shall make the project site available for inspection at any time by representatives of the District, ARB, U.S. EPA and CEC.

AQ-20 The Owner/Operator shall ensure that the Gas Turbines (S-1 & S-3) and HRSGs (S-2 & S-4) comply with requirements (a) through (i) under all operating scenarios, including duct burner firing mode and power

augmentation mode. Requirements (a) through (i) do not apply during a gas turbine start-up or shutdown. (BACT and Toxic Risk Management Policy)

- a. The nitrogen oxide (NO_x) emission concentration at emission points P-1 and P-2 each shall not exceed 2.0 ppmv, on a dry basis, corrected to 15% O₂, averaged over any 1-hour period. (BACT for NO_x)
- b. Nitrogen oxide mass emissions (calculated as NO₂) at P-1 (the combined exhaust point for S-1 Gas Turbine and S-2 HRSG after abatement by A-1 SCR System) shall not exceed 4.49 pounds per hour. Nitrogen oxide mass emissions (calculated as NO₂) at P-2 (the combined exhaust point for S-3 Gas Turbine and S-4 HRSG after abatement by A-3 SCR System) shall not exceed 4.49 pounds per hour. (BACT for NO_x)
- c. The carbon monoxide emission concentration at P-1 and P-2 each shall not exceed 4.0 ppmv, on a dry basis, corrected to 15% O₂, averaged over any rolling 3-hour period. (BACT for CO)
- d. Carbon monoxide mass emissions at P-1 and P-2 each shall not exceed 5.47 pounds per hour, averaged over any rolling 3-hour period.
- e. Ammonia (NH₃) emission concentrations at P-1 and P-2 each shall not exceed 10 ppmv, on a dry basis, corrected to 15% O₂, averaged over any rolling 3-hour period. This ammonia emission concentration shall be verified by the continuous recording of the ammonia injection rate to A-1 and A-3 SCR Systems. The correlation between the gas turbine and HRSG heat input rates, A-1 and A-3 SCR System ammonia injection rates, and corresponding ammonia emission concentration at emission points P-1 and P-2 shall be determined in accordance with Condition **AQ-30**. (Toxic Risk Management Policy for NH₃)
- f. Precursor organic compound (POC) mass emissions (as CH₄) at P-1 and P-2 each shall not exceed 2.0 ppmv, on a dry basis, corrected to 15% O₂, averaged over any rolling 3-hour period. (BACT for POC)
- g. Precursor organic compound (POC) mass emissions (as CH₄) at P-1 and P-2 each shall not exceed 1.56 pounds per hour or 0.00255 lb/MM BTU of natural gas fired. (BACT for POC)
- h. Sulfur dioxide (SO₂) mass emissions at P-1 and P-2 each shall not exceed 0.41 pounds per hour or 0.000676 lb/MM BTU of natural gas fired. (BACT for SO₂)
- i. Particulate matter (PM₁₀) mass emissions at P-1 and P-2 each shall not exceed 3.0 pounds per hour when the HRSG duct burners are not in operation. Particulate matter (PM₁₀) mass emissions at P-1 and P-2 each shall not exceed 4.3 pounds per hour when HRSG duct burners are in operation. (BACT for PM₁₀)

Compliance with the hourly NO_x emission limitations specified in Condition **AQ-25(a)** and **AQ-25(b)**, at both P1 and P2, shall not be required during

short-term excursions, limited to a cumulative total of 160 hours per rolling 12-month period. Short-term excursions are defined as 15-minute periods designated by the Owner/Operator that are the direct result of transient load conditions, not to exceed four consecutive 15-minute periods, when the 15-minute average NO_x concentration exceeds 2.0 ppmv, dry @ 15% O₂. Examples of transient load conditions include, but are not limited to the following:

1. Initiation/shutdown of combustion turbine inlet air cooling
2. Initiation/shutdown of combustion turbine water mist or steam injection for power augmentation
3. Rapid combustion turbine load changes
4. Initiation/shutdown of HRSG duct burners
5. Provision of Ancillary Services and Automatic Generation Control at the direction of the California Independent System Operator (Cal-ISO)

The maximum 1-hour average NO_x concentration for short-term excursions at P-1 and P-2 each shall not exceed 5 ppmv, dry @ 15 percent O₂ or 11.2 lb/hr (2.80 lb per 15 minute period). All emissions during short-term excursions shall be included in all calculations of hourly, daily and annual mass emission rates as required by this permit.

Verification: The project Owner/Operator shall submit documentation of compliance with all emission limits specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-21 The Owner/Operator shall ensure that the regulated air pollutant mass emission rates from each of the Gas Turbines (S-1 & S-3) during a startup or a shutdown does not exceed the respective limits established below.

	Start-Up (lb/hr)	Shutdown (lb/hr)
Oxides of Nitrogen (as NO ₂)	41	8
Carbon Monoxide (CO)	35	10
Precursor Organic Compounds (as CH ₄)	2	1
Particulate Matter (PM ₁₀)	3	3

Verification: The project Owner/Operator shall submit documentation of compliance with the emission limits in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

Conditions for All Sources

AQ-22 The Owner/Operator shall not allow total combined emissions from the Gas Turbines and HRSGs (S-1 & S-2 and S-3 & S-4) including emissions generated during Gas Turbine startups and shutdowns and transient excursions to exceed the following limits during any calendar day:

- a. 358.9 pounds of NO_x (as NO₂) per day
- b. 377.9 pounds of CO per day
- c. 71.9 pounds of POC (as CH₄) per day
- d. 197.8 pounds of PM₁₀ per day
- e. 18.2 pounds of SO₂ per day

Verification: The project Owner/Operator shall submit documentation of compliance with all emission limits specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-23 The Owner/Operator shall not allow cumulative combined emissions from the Gas Turbines and HRSGs (S-1 & S-2 and S-3 & S-4) including emissions generated during Gas Turbine startups and shutdowns and transient excursions to exceed the following limits during any consecutive 12-month period:

- a. 43.3 tons of NO_x (as NO₂) per year
- b. 48.4 tons of CO per year
- c. 11.2 tons of POC (as CH₄) per year
- d. 28.1 tons of PM₁₀ per year
- e. 2.93 tons of SO₂ per year

(Offsets and Cumulative Increase)

Verification: The project Owner/Operator shall submit documentation of compliance with all emission limits specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-24 The Owner/Operator shall not allow the combined heat input rate to the Gas Turbines and HRSGs (S-1 & S-2 and S-3 & S-4) to exceed 27,118.4 MMBTU per calendar day.

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-25 The Owner/Operator shall not allow the cumulative heat input rate to the Gas Turbines and HRSGs (S-1, S-2, S-3, S-4) combined to exceed 8,682,544.0 MMBTU per year.

Verification: A detailed report of fuel use and equipment operation shall be included in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-26 The Owner/Operator shall not allow the maximum projected annual toxic air contaminant emissions (per Condition **AQ-29** and **AQ-33**) from the Gas Turbines and HRSGs (S-1 & S-2 and S-3 & S-4) combined to exceed the following limits:

acetaldehyde	1,155 pounds per year
formaldehyde	2,706 pounds per year
benzene 1	12 pounds per year
Specified PAHs	0.71 pound per year

unless the following requirement is satisfied:

The Owner/Operator shall perform a health risk assessment to determine the total facility risk using the emission rates determined by District approved source testing and the most current Bay Area Air Quality Management District approved procedures and unit risk factors in effect at the time of the analysis. This risk analysis shall be submitted to the District and the CEC Compliance Project Manager (CPM) within 60 days of the source test date. The Owner/Operator may request that the District and the CEC CPM revise the carcinogenic compound emission limits specified above. If the Owner/Operator demonstrates to the satisfaction of the APCO that these revised emission limits will not result in a significant cancer risk, the District and the CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. (Toxic Risk Management Policy)

Verification: If prepared, the health risk analysis shall be submitted to the District and the CPM within 60 days of the source test date. Otherwise, the project Owner/Operator shall submit documentation of compliance with all emission limits specified in this Condition of Certification as part of the January 30 Quarterly Air Quality Report each year required by the verification of Condition **AQ-34**.

AQ-27 The Owner/Operator shall demonstrate compliance with Conditions **AQ-14** through **AQ-17**, **AQ-20(a)** through **AQ-20(d)**, **AQ-21**, **AQ-22(a)**, **AQ-22(b)**, **AQ-23(a)**, and **AQ-23(b)** by using properly operated and maintained continuous monitors (during all hours of operation including equipment Start-up and Shutdown periods) for all of the following parameters:

- a. Firing Hours and Fuel Flow Rates for each of the following sources:
S-1 & S-2 combined, S-3 & S-4 combined.
- b. Oxygen (O₂) concentration, nitrogen oxides (NO_x) concentration, and carbon monoxide (CO) concentration at each of the following exhaust points:
P-1 and P-2.
- c. Ammonia injection rate at A-1 and A-3 SCR Systems
- d. Any transient load conditions recorded in **AQ-27(a)** above and as described in **AQ-20(j)** shall be fully characterized and recorded on a quarter hour (15-minute period) basis.

The Owner/Operator shall record all of the above parameters every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. For each calendar day, the

Owner/Operator shall calculate and record the total firing hours, the average hourly fuel flow rates, and pollutant emission concentrations.

The Owner/Operator shall use the parameters measured above and District-approved calculation methods to calculate the following parameters:

- e. Heat Input Rate for each of the following sources: S-1 & S-2 combined and S-3 & S-4 combined.
- f. Corrected NO_x concentration, NO_x mass emission rate (as NO₂), corrected CO concentration, and CO mass emission rate at each of the following exhaust points: P-1 and P-2.

For each source, source grouping, or exhaust point, the Owner/Operator shall record the parameters specified in Conditions **AQ-27(e)** and **AQ-27(f)** at least once every 15 minutes (excluding normal calibration periods). As specified below, the Owner/Operator shall calculate and record the following data:

- g. Total Heat Input Rate for every clock hour and the average hourly Heat Input Rate for every rolling 3-hour period.
- h. On an hourly basis, the cumulative total Heat Input Rate for each calendar day for the following: each Gas Turbine and associated HRSG combined and all four sources (S-1, S-2, S-3, and S-4) combined.
- i. The average NO_x mass emission rate (as NO₂) and corrected NO_x emission concentration for every clock hour and for every quarter hour (15-minute) period.
- j. The average CO mass emission rate and corrected CO emission concentration for every clock hour and for every rolling 3-hour period.
- k. On an hourly basis, the cumulative total NO_x mass emissions (as NO₂) and the cumulative total CO mass emissions, for each calendar day for each Gas Turbine and associated HRSG combined, and all four sources (S-1, S-2, S-3, and S-4) combined.
- l. For each calendar day, the average hourly Heat Input Rates, Corrected NO_x emission concentration, NO_x mass emission rate (as NO₂), corrected CO emission concentration, and CO mass emission rate for each Gas Turbine and associated HRSG combined
- m. On a daily basis, the cumulative total NO_x mass emissions (as NO₂) and cumulative total CO mass emissions, for the previous consecutive twelve month period for all four sources (S-1, S-2, S-3, and S-4) combined.

(Regulation 1-520.1, 9-9-501, BACT, NSPS, Cumulative Increase)

Verification: The project Owner/Operator shall submit documentation of each of the parameters specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-28 To demonstrate compliance with Conditions **AQ-20(f)**, **AQ-20(g)**, **AQ-20(h)**, **AQ-20(i)**, **AQ-21**, **AQ-22(c)** through **AQ-22(e)**, and **AQ-23(c)** through **AQ-23(e)**, the Owner/Operator shall calculate and record on a daily basis, the Precursor Organic Compound (POC) mass emissions, Fine Particulate Matter (PM₁₀) mass emissions (including condensable particulate matter), and Sulfur Dioxide (SO₂) mass emissions from each power train.

The Owner/Operator shall use the actual Heat Input Rates calculated pursuant to Condition **AQ-27**, actual Gas Turbine Start-up Times, actual Gas Turbine Shutdown Times, and CEC and District-approved emission factors to calculate these emissions. The calculated emissions shall be presented as follows:

- a. For each calendar day, POC, PM₁₀, and SO₂ emissions shall be summarized for: each power train (Gas Turbine and its respective HRSG combined) and all four sources (S-1, S-2, S-3, and S-4) combined.
- b. on a daily basis, the cumulative total POC, PM₁₀, and SO₂ mass emissions, for each year for all four sources (S-1, S-2, S-3, and S-4) combined.

(Offsets, Cumulative Increase)

Verification: The project Owner/Operator shall submit documentation of each of the parameters specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-29 To demonstrate compliance with Condition **AQ-26**, the Owner/Operator shall calculate and record on an annual basis the maximum projected annual emissions of: acetaldehyde, formaldehyde, benzene, and Specified PAHs. Maximum projected annual emissions shall be calculated using the maximum Heat Input Rate of 8,682,544 MMBTU/year and the highest emission factor (pounds of pollutant per MMBTU of heat input) determined by any District approved source test of the S-1 and S-3 Gas Turbines and/or S-2 and S-4 Heat Recovery Steam Generators.

If the highest emission factor for a given pollutant occurs during minimum-load turbine operation, a reduced annual heat input rate may be utilized to calculate the maximum projected annual emissions to reflect the reduced heat input rates during gas turbine start-up and minimum-load operation. The reduced annual heat input rate shall be subject to District review and approval. (Toxic Risk Management Policy).

Verification: The project Owner/Operator shall submit documentation of each of the parameters specified in this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-30 Within 60 days of start-up of the Pico Power Plant, the Owner/Operator shall conduct District-approved source tests on exhaust point P-1 and P-2 to

determine the corrected ammonia (NH₃) emission concentration to determine compliance with Condition **AQ-20(e)**.

The source test shall determine the correlation between the heat input rates of each gas turbine (S-1 and S-3) and associated HRSG (S-2 and S-4), A-1, and A-3 SCR System ammonia injection rates, and the corresponding NH₃ emission concentrations at emission point P-1 and P-2.

The source tests shall be conducted over the expected operating range of the turbine and HRSG (including, but not limited to, minimum and full load, and SPRINT power augmentation mode) to establish the range of ammonia injection rates necessary to achieve required NO_x emission reductions while maintaining ammonia slip levels. Source testing shall be repeated on an annual basis thereafter.

Ongoing compliance with Condition **AQ-20(e)** shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlation and continuous records of ammonia injection rate.

Source test results shall be submitted to the District and the CEC Compliance Project Manager within 90 days of conducting the tests. (Toxic Risk Management Policy)

Verification: Initial source testing shall be completed within 60 days of start-up. No later than 20 working days before the execution of the source tests, the Owner/Operator shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CPM will notify the Owner/Operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District and CPM comments into the test plan.

The Owner/Operator shall notify the District and the CPM within 7 working days prior to the planned source testing date.

Source test results shall be submitted to the District and the CPM within 60 days of the source testing date.

AQ-31 Within 90 days of start-up of the Pico Power Plant and on an annual basis thereafter, the Owner/Operator shall conduct a District-approved source test on exhaust points P-1 and P-2 while each Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum load (including SPRINT power augmentation mode) to determine compliance with Conditions **AQ-20(a), (b), (c), (d), (f), (g), (h), and (i)** while each Gas Turbine and associated Heat Recovery Steam Generator are operating at minimum load to determine compliance with Conditions **AQ-20(c) and (d)**, and to verify the accuracy of the continuous emission monitors required in Condition **AQ-27**.

The Owner/Operator shall test for (at a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and mass emissions, nitrogen oxide concentration and mass emissions (as NO₂), carbon monoxide concentration and mass emissions, sulfur dioxide

concentration and mass emissions, methane, ethane, and particulate matter (PM₁₀) emissions including condensable particulate matter. Source test results shall be submitted to the District and the CEC Compliance Project Manager within 60 days of conducting the tests. (BACT)

Verification: Initial source testing shall be completed within 60 days of start-up. No later than 20 working days before the execution of the source tests, the Owner/Operator shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CPM will notify the Owner/Operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District and CPM comments into the test plan.

The Owner/Operator shall notify the District and the CPM within 7 working days prior to the planned source testing date.

Source test results shall be submitted to the District and the CPM within 60 days of the source testing date.

AQ-32 The Owner/Operator shall obtain approval for all source test procedures from the District's Source Test Section and the CEC Compliance Project Manager (CPM) prior to conducting any tests. The Owner/Operator shall comply with all applicable testing requirements for continuous emission monitors as specified in Volume V of the District's Manual of Procedures.

The Owner/Operator shall notify the District's Source Test Section and the CEC CPM in writing of the source test protocols and projected test dates at least 7 days prior to the testing date(s). As indicated in Condition **AQ-31** above, the Owner/Operator shall measure and include the contribution of condensable PM (back half) to the total PM₁₀ emissions. However, the Owner/Operator may propose alternative measuring techniques to measure condensable PM such as the use of a dilution tunnel or other appropriate method used to capture semi-volatile organic compounds. Source test results shall be submitted to the District and the CEC CPM within 60 days of conducting the tests. (BACT)

Verification: The project Owner/Operator shall submit documentation of the procedures and results of each source test conducted as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-33 Within 90 days of start-up of the Pico Power Plant, the Owner/Operator shall conduct a District-approved source tests on exhaust point P-1 and P-2 while the Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum allowable operating rates to demonstrate compliance with Condition **AQ-26**. (Toxic Risk Management Policy)

Verification: Initial source testing shall be completed within 60 days of start-up. No later than 20 working days before the execution of the source tests, the Owner/Operator shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CPM will notify the Owner/Operator

of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District and CPM comments into the test plan.

The Owner/Operator shall notify the District and the CPM within 7 working days prior to the planned source testing date.

Source test results shall be submitted to the District and the CPM within 60 days of the source testing date.

AQ-34 The Owner/Operator of the Pico Power Plant shall submit all reports (including, but not limited to monthly CEM reports, monitor breakdown reports, emission excess reports, equipment breakdown reports, etc.) as required by District Rules or Regulations and in accordance with all procedures and time limits specified in the District Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual. (Regulation 2 -6-502)

Verification: The project Owner/Operator shall submit a Quarterly Air Quality Report (QAQR) for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year. Each QAQR shall include, but not be limited to, a compliance matrix, a summary of operations activities, and a summary of all reports covered by this Condition. The January 30 report for each year shall include an annual summary of the four Quarterly Air Quality Reports covering the preceding calendar year. The QAQR shall be submitted to the California Energy Commission Compliance Project Manager (CPM).

AQ-35 The Owner/Operator of the Pico Power Plant shall maintain all records and reports on site for a minimum of 5 years. These records shall include but are not limited to: continuous monitoring records (firing hours, fuel flows, emission rates, monitor excesses, breakdowns, etc.), source test and analytical records, natural gas sulfur content analysis results, emission calculation records, records of plant upsets and related incidents. The Owner/Operator shall make all records and reports available to District and the CEC Compliance Project Manager staff upon request. (Regulation 2 -6-501)

Verification: The project Owner/Operator shall maintain a copy of each Quarterly Air Quality Report on site for a minimum of 5 years.

AQ-36 The Owner/Operator of the Pico Power Plant shall notify the District and the CEC Compliance Project Manager of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules, Regulations, and the Manual of Procedures. Notwithstanding the notification and reporting requirements given in any District Rule, Regulation, or the Manual of Procedures, the Owner/Operator shall submit written notification (facsimile is acceptable) to the Enforcement Division within 96 hours of the violation of any permit condition. (District Regulation 2-1-403)

Verification: The Owner/Operator shall include a compliance matrix in the Quarterly Air Quality Report required by the verification of Condition **AQ-34**. The Compliance Matrix shall summarize the project's compliance status for each Condition during the reporting period.

AQ-37 The Owner/Operator shall ensure that the stack height of emission points P-1 and P-2 is each at least 95 feet above grade level at the stack base. (Toxic Risk Management Policy)

Verification: Prior to the first firing of natural gas in either turbine the Owner/Operator shall provide as built drawings of the stack or other suitable proof of the minimum stack height to the District and the CPM.

AQ-38 The Owner/Operator of the Pico Power Plant shall provide adequate stack sampling ports and platforms to enable the performance of source testing. The location and configuration of the stack sampling ports shall comply with the District Manual of Procedures, Volume IV, Source Test Policy and Procedures, and shall be subject to BAAQMD review and approval. (Regulation 1 -501)

Verification: Prior to the first firing of natural gas in either turbine the Owner/Operator shall provide as built drawings of the stack or other suitable proof of the minimum stack height to the District and the CPM.

AQ-39 Within 180 days of the issuance of the Authority to Construct for the Pico Power Plant, the Owner/Operator shall contact the BAAQMD Technical Services Division regarding requirements for the continuous emission monitors, sampling ports, platforms, and source tests required by Conditions **AQ-27, AQ-30, AQ-31, AQ-32, AQ-33, AQ-38, and AQ-45**. All source testing and monitoring shall be conducted in accordance with the BAAQMD Manual of Procedures. (Regulation 1 -501)

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-40 Prior to the issuance of the BAAQMD Authority to Construct for the Pico Power Plant, the Owner/Operator shall demonstrate that valid emission reduction credits in the amount of 43.3 tons/year of Nitrogen Oxides (as defined by District Regulation 2-2-302) are under their control through enforceable contracts, option to purchase agreements, or equivalent binding legal documents. (Offsets)

Verification: The project Owner/Operator must submit all ERC documentation to the District and the CPM prior to the issuance of the BAAQMD Authority to Construct.

AQ-41 Prior to the start of construction of the Pico Power Plant, the Owner/Operator shall provide to the District valid emission reduction credit banking certificates

in the amount of 43.3 tons/year of Nitrogen Oxides or equivalent as defined by District Regulations 2 -2-302 and 2-2-302.2. (Offsets)

Verification: The project Owner/Operator must surrender all ERC certificates to the District and provide copies to the CPM prior to the start of construction.

AQ-42 Pursuant to BAAQMD Regulation 2, Rule 6, section 404.1, the Owner/Operator of the Pico Power Plant shall submit an application to the BAAQMD for a major facility review permit within 12 months of completing construction as demonstrated by the first firing of any gas turbine or HRSG duct burner. (Regulation 2-6-404.1)

Verification: The Owner/Operator shall notify the CPM within 10 working days of any application for, issuance of, and/or modification to any permit pertaining to air quality.

AQ-43 Pursuant to 40 CFR Part 72.30(b)(2)(ii) of the Federal Acid Rain Program, the Owner/Operator of the Pico Power Plant shall submit an application for a Title IV operating permit to the BAAQMD at least 24 months before operation of any of the gas turbines (S-1, S-3) or HRSGs (S-2, S-4). (Regulation 2, Rule 7)

Verification: The Owner/Operator shall notify the CPM within 10 working days of any application for, issuance of, and/or modification to any permit pertaining to air quality.

AQ-44 The Owner/Operator of the Pico Power Plant shall comply with the continuous emission monitoring requirements of 40 CFR Part 75. (Regulation 2, Rule 7)

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-45 The Owner/Operator shall take monthly samples of the natural gas combusted at the Pico Power Plant. The samples shall be analyzed for sulfur content using District-approved laboratory methods. The sulfur content test results shall be retained on site for a minimum of five years from the test date and shall be utilized to satisfy the requirements of 40 CFR Part 60, subpart GG.

Verification: The project Owner/Operator shall submit documentation of compliance with this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

NEW TEMPORARY SOURCE

S-6 Temporary Combustion Gas Turbine (DVR 191-555), General Electric LM 6000 PC, natural gas fired, 49.4 MW (nominal), 473.7 MMBtu/hr maximum rated capacity; abated by A1 Selective Catalytic Reduction System and A2 Oxidation Catalyst or A3 Selective Catalytic Reduction System and A4 Oxidation Catalyst.

CONDITIONS FOR S-6, TEMPORARY GAS TURBINE

AQ-46 The project owner shall only operate S6 on a temporary basis when S1 or S3 is being repaired or maintained. (Basis: Cumulative Increase; offsets)

Verification: The project owner shall include in each quarterly report required by Condition of Certification **AQ-34** a log including each day when S6 is used, documenting which turbine S6 replaced along with the appropriate serial numbers and a statement certifying that the turbine being replaced is not in operation at the same time S6 is in operation.

AQ-47 The project owner shall not operate S6 when both S1 and S3 are in operation. (Basis: Cumulative Increase; offsets)

Verification: The project owner shall submit documentation of compliance with this Condition of Certification or a statement certifying S6 was not used for the quarter as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-48 The project owner shall operate S6 in compliance with all regulatory requirements and permit conditions that apply to S-1 or S-3, except the source testing frequency specified in **AQ-31**. (Basis: Cumulative Increase; Offsets; BACT)

Verification: The project owner shall submit documentation of compliance with this Condition of Certification or a statement certifying S6 was not used for the quarter as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-49 Within 60 days of S6 initial start-up and at least once every 8,760 hours of S6 operation thereafter, the project owner shall conduct a District-approved source test on exhaust points P-1 or P-2 while S-6 and associated Heat Recovery Steam Generator are operating at maximum load (including SPRINT power augmentation mode) to determine compliance with **AQ-20 (a), (b), (c), (d), (f), (g), (h), and (i)** while S6 and associated Heat Recovery Steam Generator are operating at minimum load to determine compliance with **AQ-20 (c) and (d)**, and to verify the accuracy of the continuous emission monitors required in **AQ-27**. The project owner shall test for (at a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and mass emissions, nitrogen oxide concentration and mass emissions (as NO₂), carbon monoxide concentration and mass emissions, sulfur dioxide concentration and mass emissions, methane, ethane, and PM₁₀ emissions including condensable particulate matter. Source test results shall be submitted to the District and the Energy Commission's CPM within 60 days of conducting the tests. [Basis: BACT]

Verification: Initial source testing shall be completed within 60 days of start-up. No later than 20 working days before the execution of the source tests, the project owner shall submit to the District and the CPM a detailed source test plan designed to satisfy the requirements of this Condition. The District and the CPM will notify the project owner of any necessary modifications to the plan within 20 working days of receipt of the plan;

otherwise, the plan shall be deemed approved. The project owner shall incorporate the District and CPM comments into the test plan.

The project owner shall notify the District and the CPM within 7 working days prior to the planned source testing date.

Source test results shall be submitted to the District and the CPM within 60 days of the source testing date.

AQ-50 The project owner shall include all emissions from S6 as part of S1 or S3 total emissions to demonstrate compliance with all regulatory requirements and permit conditions that apply to S1 or S3. (Basis: Cumulative Increase; Offset)

Verification: The project owner shall submit documentation of compliance with this Condition of Certification as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-51 The project owner shall notify the District's Director of Compliance and Enforcement Division, and the CPM in writing, no later than 24 hours of putting S6 in service and taking S6 out of service. The notification shall include

- a. Plant number;
- b. The date when S6 is put in service or taken out of service;
- c. A brief description of the reason(s) to put S6 in service. (Basis: Cumulative Increase; Offset)

Verification: The project owner shall submit documentation of compliance with this Condition of Certification or a statement certifying S6 and the associated serial number was not used for the quarter as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

AQ-52 The project owner shall maintain the following records on site for a minimum of 5 years and make them available to the District and the CEC CPM upon request:

- a. Identify the turbine(s) in operation and in source tests by their serial number(s) for S1 (DVR 191-498), S3 (DVR 191-502), and S6 (DVR 191-555). (Basis: Cumulative Increase)
- b. The starting and ending dates and times when S1 or S3 is being taken out of service for repair, inspection, maintenance, or other activity deemed necessary by the project owner.
- c. A description of each activity required under **AQ-52(b)**.
- d. A copy of any notification required under **AQ-51**.

(Basis: Cumulative Increase; Regulation 2-6-501)

Verification: The project owner shall maintain documentation of compliance with this Condition of Certification for a minimum of 5 years, and submit statement certifying S6

and the associated serial number was not used for the quarter as part of the Quarterly Air Quality Report required by the verification of Condition **AQ-34**.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

These Conditions of Certification were changed per the following Energy Commission Approval(s) or Order(s):

Type of Approval	Approval Date or Order #	Docket Transaction Number (TN)	Changed Conditions of Certification
Verification Change	2005-03-22	33830	BIO-9

Designated Biologist Selection

BIO-1 The project owner shall submit the resume, including reference contact information, of the proposed Designated Biologist to the Compliance Project Manager (CPM) for approval.

Verification: The project owner shall submit the specified information at least 60 days prior to the start of any site (or related facilities) mobilization. Site and related facility activities shall not commence until an approved Designated Biologist is available to be on site.

The Designated Biologist must meet the following minimum qualifications:

1. 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; and
3. At least one year of field experience with biological resources found in or near the project area.

If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist.

Designated Biologist Duties

BIO-2 The project owner shall ensure that the Designated Biologist shall perform the following activities during any site (or related facilities) mobilization, ground disturbance, grading, construction, operation, and closure activities:

1. Advise the project owner's Construction and Operation Managers on the implementation of the biological resources Conditions of Certification;
2. Be available to supervise or conduct mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as wetlands and special status species or their habitat;

3. Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (parking lots) for animals in harms way;
4. Notify the project owner and the CPM of any non-compliance with any biological resources Condition of Certification; and
5. Respond directly to inquiries of the CPM regarding biological resource issues.

Verification: The project owner shall ensure that the Designated Biologist maintains written records of the tasks described above, and summaries of these records shall be submitted in the Monthly Compliance Reports.

During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report.

Designated Biologist Authority

BIO-3 The project owner's Construction/Operation Manager shall act on the advice of the Designated Biologist to ensure conformance with the biological resources Conditions of Certification.

If required by the Designated Biologist, the project owner's Construction/Operation Manager shall halt all site mobilization, ground disturbance, grading, construction, and operation activities in areas specified by the Designated Biologist.

The Designated Biologist shall:

1. Require a halt to all activities in any area when determined that there would be adverse impact to biological resources if the activities continued;
2. Inform the project owner and the Construction/Operation Manager when to resume activities; and
3. Notify the CPM if there is a halt of any activities, and advise the CPM of any corrective actions that have been taken, or will be instituted, as a result of the halt.

Verification: The project owner shall ensure that the Designated Biologist notifies the CPM immediately (and no later than the following morning of the incident, or Monday morning in the case of a weekend) of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities. The project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem.

Whenever corrective action is taken by the project owner, a determination of success or failure will be made by the CPM within five working days after receipt of notice that

corrective action is completed, 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.

Worker Environmental Awareness Program

BIO-4 The project owner shall develop and implement a CPM approved Worker Environmental Awareness Program (WEAP) in which each of its employees, as well as employees of contractors and subcontractors who work on the project site or any related facilities during site mobilization, ground disturbance, grading, construction, operation and closure, are informed about sensitive biological resources associated with the project.

The WEAP must:

1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material is made available to all participants;
2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas;
3. Present the reasons for protecting these resources;
4. Present the meaning of various temporary and permanent habitat protection measures;
5. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
6. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Verification: At least 60 days prior to the start of any site (or related facilities) mobilization, the project owner shall provide to the CPM two copies of the WEAP and all supporting written materials prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The project owner shall provide 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.

The signed training acknowledgement forms shall be kept on file by the project owner for a period of at least six months after the start of commercial operation.

During project operation, signed statements for active project operational personnel shall be kept on file for six months following the termination of an individual's employment.

Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP)

BIO-5 The project owner shall submit two copies of the proposed BRMIMP to the CPM (for review and approval) and to USFWS (for review and comment) and shall implement the measures identified in the approved BRMIMP.

The final BRMIMP shall identify:

1. All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the project owner;
2. All biological resources Conditions of Certification identified in the Commission's Final Decision;
3. All biological resource mitigation, monitoring and compliance measures required in federal agency terms and conditions, if any, such as those provided in a USFWS Biological Opinion;
4. All biological resources mitigation, monitoring and compliance measures required in other state agency terms and conditions, if any, such as those provided in a CDFG Incidental Take Permit and Streambed Alteration Agreement, and in Regional Water Quality Control Board permits;
5. All biological resources mitigation, monitoring and compliance measures required in local agency permits, such as site grading and landscaping requirements;
6. All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation and closure;
7. All required mitigation measures for each sensitive biological resource;
8. Required habitat compensation strategy, including provisions for acquisition, enhancement, and management for any temporary and permanent loss of sensitive biological resources;
9. A detailed description of measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
10. All locations on a map, at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction;
11. Aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities - one set of photographs taken prior to any site or related facilities mobilization disturbance and one set of photographs taken subsequent to completion of project construction. Include planned timing of aerial photography and a description of why times were chosen;
12. Duration for each type of monitoring and a description of monitoring methodologies and frequency;

13. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
14. All performance standards and remedial measures to be implemented if performance standards are not met;
15. A discussion of biological resources related facility closure measures;
16. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and
17. A copy of all biological resources permits obtained.

Verification: The project owner shall provide the specified document at least 60 days prior to start of any site (or related facilities) mobilization.

The CPM, in consultation with the USFWS and any other appropriate agencies, will determine the BRMIMP's acceptability within 45 days of receipt.

The project owner shall notify the CPM no less than five working days before implementing any modifications to the approved BRMIMP to obtain CPM approval.

Any changes to the approved BRMIMP must also be approved by the CPM in consultation with the USFWS and appropriate agencies to ensure no conflicts exist.

Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the project's site mobilization, ground disturbance, grading, and construction phases, and which mitigation and monitoring items are still outstanding.

U.S. Fish and Wildlife Consultation

BIO-6 The project owner shall provide final copies of all documents obtained as a result of formal consultation with the USFWS. The terms and conditions contained in any documents obtained from the USFWS shall be incorporated into the project's BRMIMP.

Verification: At least 60 days prior to initial commissioning activities, the project owner shall submit to the CPM copies of all documents obtained as the result of consultation with the U. S. Fish and Wildlife Service.

Adaptive Management Plan

BIO-7 The project owner shall prepare an adaptive management plan that demonstrates how the habitat compensation acreage will be managed for the preservation and recovery of serpentine endemic species.

Verification: At least 60 days prior to initial commissioning activities, or initial turbine firing, the project owner shall submit to the CPM a copy of the adaptive management plan to be reviewed and approved in consultation with staff and the USFWS. The approved adaptive management plan shall be incorporated into the project's BRMIMP.

Mitigation Measures

- BIO-8** The project owner shall implement the mitigation measures listed below.
1. Provide wildlife escape ramps for construction areas that contain steep walled holes or trenches if outside of an approved, permanent exclusionary fence;
 2. Inspect trenches each morning for entrapped animals prior to the beginning of construction. Construction will be allowed to begin only after trapped animals are able to escape voluntarily;
 3. Inspect all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater for sensitive species (such as burrowing owls) prior to pipe burial. Pipes to be left in trenches overnight will be capped;
 4. Provide a post-construction compliance report, within 45 calendar days of completion of the project, to the Energy Commission CPM;
 5. Report all inadvertent deaths of sensitive species to the appropriate project representative. Injured animals shall be reported to CDFG and the project owner shall follow instructions that are provided by CDFG.
 6. Conduct pre-construction bird nest surveys. Upon discovery of any bird nests, the CPM will be notified as to appropriate action necessary.

All inspections may be performed by either the Designated Biologist or his/her appropriately trained and qualified delegate.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP.

Habitat Compensation

- BIO-9** To compensate for potential impacts to serpentine habitats and associated endemic species, the project owner shall provide 40 acres of land within critical habitat occupied by sensitive serpentine endemic species. The project owner shall calculate an appropriate endowment for management of the compensation habitat in perpetuity using the Center for Natural Lands Management Property Analysis Record (PAR). Also to be provided is the name of the entity that would manage and protect the land in perpetuity.

Verification: At least 60 days prior to initial commissioning activities, the project owner shall provide to the CPM for approval, in consultation with the USFWS, the name of the management entity and written verification that the compensation lands have been purchased and protected in perpetuity. The project owner shall also provide the PAR analysis and written verification that the appropriate endowment funds (determined by the PAR analysis) have been received by the approved management entity. In the event of termination of any agreement between the project owner and the habitat management entity, the CPM shall be notified within ten days of termination.

Compensation habitat shall be transferred to a CPM-approved nonprofit conservation organization within 60 days of termination of any habitat conservation management agreement.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

CULTURAL RESOURCES CONDITIONS OF CERTIFICATION

- CUL-1** Prior to the start of ground disturbance, the project owner shall obtain the services of a Cultural Resources Specialist (CRS), and one or more alternates, if alternates are needed, to manage all monitoring, mitigation and curation activities. The CRS may elect to obtain the services of Cultural Resource Monitors (CRMs) and other technical specialists, if needed, to assist in monitoring, mitigation and curation activities. The project owner shall ensure that the CRS evaluates any cultural resources that are newly discovered or that may be affected in an unanticipated manner for eligibility to the California Register of Historic Resources (CRHR). No ground disturbance shall occur prior to CPM approval of the CRS, unless specifically approved by the CPM.

Cultural Resources Specialist

The resume for the CRS and alternate(s) shall include information demonstrating that the minimum qualifications specified in the U.S. Secretary of Interior Guidelines, as published in the Code of Federal Regulations, 36 CFR Part 61 are met. In addition, the CRS shall have the following qualifications:

1. The technical specialty of the CRS shall be appropriate to the needs of the project and shall include, a background in anthropology, archaeology, history, architectural history or a related field; and
2. At least three years of archaeological or historic, as appropriate, resource mitigation and field experience in California.

The resume of the CRS shall include the names and telephone numbers of contacts familiar with the work of the CRS on referenced projects, and demonstrate that the CRS has the appropriate education and experience to accomplish the cultural resource tasks that must be addressed during ground disturbance, grading, construction and operation. In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the Compliance Project Manager (CPM), that the proposed CRS or alternate has the appropriate training and background to effectively implement the conditions of certification.

Cultural Resources Monitor

CRMs shall have the following qualifications:

1. a BS or BA degree in anthropology, archaeology, historic archaeology or a related field and one year experience monitoring in California; or
2. an AS or AA degree in anthropology, archaeology, historic archaeology or a related field and four years experience monitoring in California; or

3. enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historic archaeology or a related field and two years of monitoring experience in California.

Cultural Resources Technical Specialists

The resume(s) of any additional technical specialists, e.g. historic archeologist, historian, architectural historian, physical anthropologist; shall be submitted to the CPM for approval.

Verification: The project owner shall submit the resume for the CRS, and alternate(s) if desired, to the CPM for review and approval at least 45 days prior to the start of ground disturbance.

At least 10 days prior to a termination or release of the CRS, the project owner shall submit the resume of the proposed new CRS to the CPM for review and approval.

At least 20 days prior to ground disturbance, the CRS shall provide a letter naming anticipated CRMs for the project and stating that the identified CRMs meet the minimum qualifications for cultural resource monitoring required by this condition. If additional CRMs are obtained during the project, the CRS shall provide additional letters to the CPM identifying the CRMs and attesting to the qualifications of the CRM, at least five days prior to the CRM beginning on-site duties. At least 10 days prior to beginning tasks, the resume(s) of any additional technical specialists shall be provided to the CPM for review and approval.

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

CUL-2 Prior to the start of ground disturbance, the project owner shall provide the CRS and the CPM with maps and drawings showing the footprint of the power plant and all linear facilities. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:2000 or 1" = 200') for plotting individual artifacts. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review submittals and in consultation with the CRS approve those that are appropriate for use in cultural resources planning activities.

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

At a minimum, the CRS shall consult weekly with the project construction manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.

The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases. No ground disturbance shall occur

prior to CPM approval of maps and drawings, unless specifically approved by the CPM.

Verification: The project owner shall submit the subject maps and drawings at least 40 days prior to the start of ground disturbance. The CPM will review submittals in consultation with the CRS and approve maps and drawings suitable for cultural resources planning activities.

If there are changes to any project related footprint, revised maps and drawings shall be provided at least 15 days prior to start of ground disturbance for those changes.

If project construction is phased, if not previously provided, the project owner shall submit the subject maps and drawings 15 days prior to each phase.

A current schedule of anticipated project activity shall be provided to the CRS on a weekly basis during ground disturbance and also provided in each Monthly Compliance Report (MCR).

The project owner shall provide written notice of any changes to scheduling of construction phases within five days of identifying the changes.

CUL-3 Prior to the start of ground disturbance, the project owner shall submit the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as prepared by the CRS, to the CPM for approval. The CRMMP shall identify general and specific measures to minimize potential impacts to sensitive cultural resources. Copies of the CRMMP shall reside with the CRS, alternate CRS, each monitor, and the project owner's on-site manager. No ground disturbance shall occur prior to CPM approval of the CRMMP, unless specifically approved by the CPM.

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

1. A proposed general research design that includes a discussion of research questions and testable hypotheses applicable to the project area. A refined research design will be prepared for any resource where data recovery is required.
2. The following statement shall be added to the Introduction: "Any discussion, summary, or paraphrasing of the conditions in this CRMMP is intended as general guidance and as an aid to the user in understanding the conditions and their implementation. If there appears to be a discrepancy between the conditions and the way in which they have been summarized, described, or interpreted in the CRMMP, the conditions, as written in the Final Decision, supercede any interpretation of the conditions in the CRMMP. (The Cultural Resources Conditions of Certification are attached as an appendix to this CRMMP.)"
3. Specification of the implementation sequence and the estimated time frames needed to accomplish all project-related tasks during

ground disturbance, construction, and post-construction analysis phases of the project.

4. Identification of the person(s) expected to perform each of the tasks, their responsibilities; and the reporting relationships between project construction management and the mitigation and monitoring team.
5. A discussion of the inclusion of Native American observers or monitors, the procedures to be used to select them, and their role and responsibilities.
6. A discussion of all avoidance measures (such as flagging or fencing), to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during construction and/or operation, and identification of areas where these measures are to be implemented. The discussion shall address how these measures would be implemented prior to the start of construction and how long they would be needed to protect the resources from project-related effects.
7. A discussion of the requirement that all cultural resources encountered shall be recorded on a DPR form 523 and mapped (may include photos). In addition, all archaeological materials collected as a result of the archaeological investigations (survey, testing, data recovery) shall be curated in accordance with The State Historical Resources Commission's "Guidelines for the Curation of Archaeological Collections," into a retrievable storage collection in a public repository or museum. The public repository or museum must meet the standards and requirements for the curation of cultural resources set forth at Title 36 of the Federal Code of Regulations, Part 79.
8. A discussion of any requirements, specifications, or funding needed for curation of the materials to be delivered for curation and how requirements, specifications and funding shall be met. If archaeological materials are to be curated, the name and phone number of the contact person at the institution. This shall include information indicating that the project owner will pay all curation fees and state that any agreements concerning curation will be retained and available for audit for the life of the project.
9. A discussion of the availability and the designated specialist's access to equipment and supplies necessary for site mapping, photographing, and recovering any cultural resource materials encountered during construction.
10. A discussion of the proposed Cultural Resource Report (CRR) which shall be prepared according to Archaeological Resource Management Report (ARMR) Guidelines.

Verification: The project owner shall submit the subject CRMMP at least 30 days prior to the start of ground disturbance. Per ARMN Guidelines the author's name shall appear on the title page of the CRMMP. Ground disturbance activities may not commence until the CRMMP is approved, unless specifically approved by the CPM. A letter shall be provided to the CPM indicating that the project owner would pay curation fees for any materials collected as a result of the archaeological investigations (survey, testing, data recovery).

CUL-4 The project owner shall submit the Cultural Resources Report (CRR) to the CPM for approval. The CRR shall be written by the CRS and shall be provided in the ARMN format. The CRR shall report on all field activities including dates, times and locations, findings, samplings and analysis. All survey reports, Department of Parks and Recreation (DPR) 523 forms and additional research reports not previously submitted to the California Historic Resource Information System (CHRIS) and the State Historic Preservation Officer (SHPO) shall be included as an appendix to the CRR.

Verification: The project owner shall submit the subject CRR within 90 days after completion of ground disturbance (including landscaping). Within 10 days after CPM approval, the project owner shall provide documentation to the CPM that copies of the CRR have been provided to the SHPO, the CHRIS and the curating institution (if archaeological materials were collected).

CUL-5 Prior to and for the duration of ground disturbance, the project owner shall provide Worker Environmental Awareness Program (WEAP) training to all new workers within their first week of employment. The training may be presented in the form of a video. The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Samples or visuals of artifacts that might be found in the project vicinity;
3. Information that the CRS, alternate CRS, and CRMs have the authority to halt construction to the degree necessary, as determined by the CRS, in the event of a discovery or unanticipated impact to a cultural resource;
4. Instruction that employees are to halt work on their own in the vicinity of a potential cultural resources discovery, and shall contact their supervisor and the CRS or CRM; and that redirection of work would be determined by the construction supervisor and the CRS;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. An acknowledgement form signed by each worker indicating that they have received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

No ground disturbance shall occur prior to implementation of the WEAP program, unless specifically approved by the CPM.

Verification: The project owner shall provide in the Monthly Compliance Report the WEAP Certification of Completion form of persons who have completed the training in the prior month and a running total of all persons who have completed training to date.

CUL-6 The project owner shall ensure that the CRS, alternate CRS, or CRMs shall monitor ground disturbance full time in the vicinity of the project site, linears and ground disturbance at laydown areas or other ancillary areas to ensure there are no impacts to undiscovered resources and to ensure that known resources are not impacted in an unanticipated manner. In the event that the CRS determines that full time monitoring is not necessary in certain locations, a letter or e-mail providing a detailed justification for the decision to reduce the level of monitoring shall be provided to the CPM for review and approval prior to any reduction in monitoring.

CRMs shall keep a daily log of any monitoring or cultural resource activities and the CRS shall prepare a weekly summary report on the progress or status of cultural resources related activities. The CRS may informally discuss cultural resource monitoring and mitigation activities with Energy Commission technical staff.

The CRS and the project owner shall notify the CPM by telephone or e-mail of any incidents of non-compliance with the conditions of certification and/or applicable LORS upon becoming aware of the situation. The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the conditions of certification.

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

A Native American monitor shall be obtained, to monitor ground disturbance in areas where Native American artifacts may be discovered. Informational lists of concerned Native Americans and Guidelines for monitoring shall be obtained from the Native American Heritage Commission. Preference in selecting a monitor shall be given to Native Americans with traditional ties to the area that shall be monitored. The Muwekma Ohlone Tribe meets this requirement.

Verification: During the ground disturbance phases of the project, if the CRS wishes to reduce the level of monitoring occurring at the project, a letter or e-mail identifying the area(s) where the CRS recommends the reduction and justifying the reductions in monitoring shall be submitted to the CPM for review and approval. Documentation justifying a reduced level of monitoring shall be submitted to the CPM at least 24 hours prior to the date of planned reduction in monitoring.

During the ground disturbance phases of the project, the project owner shall include in the MCR to the CPM copies of the weekly summary reports prepared by the CRS regarding project related cultural resources monitoring. Copies of daily logs shall be retained and made available for audit by the CPM.

Within 24 hours of recognition of a non-compliance issue with the conditions of certification and/or applicable LORS, the CRS and the project owner shall notify the CPM by telephone of the problem and of steps being taken to resolve the problem. The telephone call shall be followed by an e-mail or fax detailing the non-compliance issue and the measures necessary to achieve resolution of the issue. Daily logs shall include forms detailing any instances of non-compliance. In the event of any non-compliance issue, a report written no sooner than two weeks after resolution of the issue that describes the issue, resolution of the issue and the effectiveness of the resolution measures, shall be provided in the next MCR.

One week prior to ground disturbance in areas where there is a potential to discover Native American artifacts, the project owner shall send notification to the CPM identifying the person(s) retained to conduct Native American monitoring. The project owner shall also provide a plan identifying the proposed monitoring schedule and information explaining how Native Americans who wish to provide comments will be allowed to comment. If efforts to obtain the services of a qualified Native American monitor are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow ground disturbance to proceed without a Native American monitor.

CUL-7 The project owner shall grant authority to halt construction to the CRS, alternate CRS and the CRMs in the event previously unknown cultural resource sites or materials are encountered, or if known resources may be impacted in a previously unanticipated manner (discovery). Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event cultural resources are found or impacts can be anticipated, the halting or redirection of construction shall remain in effect until all of the following have occurred:

1. The CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e. work stoppage or redirection), a recommendation of eligibility and recommendations for mitigation of any cultural resources discoveries whether or not a determination of significance has been made;
2. The CRS, the project owner, and the CPM have conferred and determined what, if any, data recovery or other mitigation is needed; and
3. Any necessary data recovery and mitigation has been completed.

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

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FACILITY DESIGN CONDITIONS OF CERTIFICATION

GEN-1 The project owner shall design, construct and inspect the project in accordance with the 1998 California Building Standards Code (CBSC) (also known as Title 24, California Code of Regulations), which encompasses the California Building Code (CBC), California Building Standards Administrative Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, California Code for Building Conservation, California Reference Standards Code, and all other applicable engineering LORS in effect at the time initial design plans are submitted to the CBO for review and approval. (The CBSC in effect is that edition that has been adopted by the California Building Standards Commission and published at least 180 days previously.) All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the Transmission System Engineering section of this document.

In the event that the initial engineering designs are submitted to the CBO when a successor to the 1998 CBSC is in effect, the 1998 CBSC provisions identified herein shall be replaced with the applicable successor provisions. 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.

Verification: Within 30 days after receipt of the Certificate of Occupancy, the project owner shall submit to the Compliance Project Manager (CPM) a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met in the area of facility design. The project owner shall provide the CPM a copy of the Certificate of Occupancy within 30 days of receipt from the CBO [1998 CBC, Section 109 – Certificate of Occupancy].

GEN-2 Prior to submittal of the initial engineering designs for CBO review, the project owner shall furnish to the 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 list of proposed submittal packages of designs, calculations and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM when requested.

Verification: At least 60 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, the Master Drawing List and the Master Specifications List of documents to be submitted to the CBO for review and approval. These documents shall be the pertinent design documents for the major structures and

equipment listed in Facility Design Table 1 below. Major structures and equipment shall be added to or deleted from the table only with CPM approval. The project owner shall provide schedule updates in the Monthly Compliance Report.

Facility Design Table 1: Major Structures and Equipment List

Equipment/System	Quantity (Plant)
Combustion Turbine (CT) Foundation and Connections	2
Combustion Turbine Generator Foundation and Connections	2
Steam Turbine (ST) Foundation and Connections	1
Steam Turbine Generator Foundation and Connections	1
Steam Condenser and Auxiliaries Foundation and Connections	1
Heat Recovery Steam Generator (HRSG) Structure, Foundation and Connections	2
HRSG Feed Pumps Foundation and Connections	4
HRSG Stack Structure, Foundation and Connections	2
CT/ST Main Transformer Foundation and Connections	2
Auxiliary or Station Service Transformer Foundation and Connections	6
CT Inlet Air Plenum Structure, Foundation and Connections	2
CT Inlet Chillers	2
HRSG Transition Duct from CTG — Structure	2
Condensate Pumps Foundation and Connections	3
Circulating Water Pumps Foundation and Connections	3
Power Cycle Makeup and Storage Pumps Foundation and Connections	2
Cooling Tower Makeup Pumps Foundation and Connections	2
Demineralized Water Storage Tank and Pump Foundations and Connections	1
Closed Cycle Cooling Water Heat Exchanger Foundation and Connections	2
Auxiliary Cooling Water Pumps Foundation and Connections	2
Waste Water Collection System Foundation and Connections	1
Fire Protection System	1
Cooling Tower Structure, Foundation and Connections	1
Generator Breakers Foundation and Connections	3
Transformer Breakers Foundation and Connections	3
Natural Gas Metering Station Structure, Foundation and Connections	1
Natural Gas Compressor Skid Foundation and Connections	3
Ammonia Storage Facility Foundation and Connections	1
Closed Cycle Cooling Pumps Foundation and Connections	2
Closed Cycle Cooling Heat Exchangers	2

Equipment/System	Quantity (Plant)
Demineralizer – Reverse Osmosis (RO) System Foundation and Connections	1
Warehouse/Shop Structure, Foundation and Connections	1
Gas Compressor Building Structure, Foundation and Connections	1
Ammonia Vaporizer System Foundation and Connections	2
Continuous Emissions Monitoring Systems Structure, Foundation and Connections	2
Sound Wall at Property Line	1
Potable Water Systems	1 Lot
Drainage Systems (including sanitary drain and waste)	1 Lot
High Pressure and Large Diameter Piping and Pipe Racks	1 Lot
HVAC and Refrigeration Systems	1 Lot
Temperature Control and Ventilation Systems (including water and sewer connections)	1 Lot
Building Energy Conservation Systems	1 Lot
Switchyard, Buses and Towers	1 Lot
Electrical Duct Banks	1 Lot

GEN-3 The project owner shall make payments to the CBO for design review, plan check and construction inspection based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. These fees may be consistent with the fees listed in the 1998 CBC [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], adjusted for inflation and other appropriate adjustments; may be based on the value of the facilities reviewed; may be based on hourly rates; or may be as otherwise agreed by the project owner and the CBO.

Verification: The project owner shall make the required payments to the CBO in accordance with the agreement between the project owner and the CBO. The project owner shall send a copy of the CBO's receipt of payment to the CPM in the next Monthly Compliance Report indicating that the applicable fees have been paid.

GEN-4 Prior to the start of rough grading, 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 (Cal. Code Regs., tit. 24, § 4-209, Designation of Responsibilities)]. All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the Transmission System Engineering section of this document.

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.

The RE shall:

1. Monitor construction progress of work requiring CBO design review and inspection to ensure compliance with LORS;
2. Ensure that construction of all the facilities subject to CBO design review and inspection conforms in every material respect to the applicable LORS, these Conditions of Certification, 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 any 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.

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.

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, the resume 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 resume 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 rough grading, the project owner shall assign at least one of each of the following California registered engineers to the project:

- A. a civil engineer; and
- B. a soils engineer, or a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering.

Prior to the start of construction, the project owner shall assign at least one of each of the following California registered engineers to the project:

- C. a design engineer, who is either a structural engineer or a civil engineer 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 sections 6730, 6731 and 6736 requires state registration to practice as a civil engineer or structural engineer in California.] All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the Transmission System Engineering section of this document.

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 all responsible engineers assigned to the project [1998 CBC, Section 104.2, Powers and Duties of Building Official].

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications and registration number of the newly assigned responsible engineer to the CBO for review and approval. The project owner shall notify the CPM of the CBO's approval of the new engineer.

- A. The civil engineer shall:
 - 1. Review the Foundation Investigations Report, Geotechnical Report or Soils Report prepared by the soils engineer, the geotechnical engineer, or by a civil engineer experienced and knowledgeable in the practice of soils engineering;
 - 2. Design, or be responsible for design, stamp, and sign all plans, calculations and specifications for proposed site work,

civil works and related facilities requiring design review and inspection by the CBO. 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

3. 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.

B. The soils engineer, geotechnical engineer, or civil engineer experienced and knowledgeable in the practice of soils engineering, shall:

1. Review all the engineering geology reports;
2. Prepare the Foundation Investigations Report, Geotechnical Report or Soils Report containing field exploration reports, laboratory tests and engineering analysis detailing the nature and extent of the soils that may be susceptible to liquefaction, rapid settlement or collapse when saturated under load [1998 CBC, Appendix Chapter 33, Section 3309.5, Soils Engineering Report; Section 3309.6, Engineering Geology Report; and Chapter 18, Section 1804, Foundation Investigations];
3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 1998 CBC, Appendix Chapter 33; Section 3317, Grading Inspections (depending on the site conditions, this may be the responsibility of either the soils engineer or engineering geologist or both); and
4. Recommend field changes to the civil engineer and RE.
5. 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 [1998 CBC, section 104.2.4, Stop orders].

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 engineering LORS;

4. Evaluate and recommend necessary changes in design; and
 5. Prepare and sign all major building plans, specifications and calculations.
- D. The mechanical engineer shall be responsible for, and sign 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's Decision.
- E. The electrical engineer shall:
1. Be responsible for the electrical design of the project; and
 2. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of rough grading, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible civil engineer and soils (geotechnical) engineer assigned to the project.

At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of construction, the project owner shall submit to the CBO for review and approval, resumes and registration numbers of the responsible design engineer, mechanical engineer and electrical engineer assigned to the project.

The project owner shall notify the CPM of the CBO's approvals of the responsible engineers within five days of the approval.

If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the resume 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-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 the 1998 CBC, Chapter 17 [Section 1701, Special Inspections; Section 1701.5, Type of Work (requiring special inspection)]; and Section 106.3.5, Inspection and observation program. All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the Transmission System Engineering section of this document.

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 for corrective action [1998 CBC, Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector]; 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.

A certified weld inspector, certified by the American Welding Society (AWS), and/or American Society of Mechanical Engineers (ASME) as applicable, shall inspect welding performed on-site requiring special inspection (including structural, piping, tanks and pressure vessels).

Verification: At least 15 days (or project owner and CBO approved alternative timeframe) 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 If any discrepancy in design and/or construction is discovered in any engineering work that has undergone CBO design review and approval, the project owner shall document the discrepancy and recommend the corrective action required [1998 CBC, Chapter 1, Section 108.4, Approval Required; Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector; Appendix Chapter 33, Section 3317.7, Notification of Noncompliance]. The discrepancy documentation shall be submitted to the CBO for review and approval. The discrepancy documentation shall reference this Condition of Certification and, if appropriate, the applicable sections of the CBC and/or other LORS.

Verification: The project owner shall transmit a copy of the CBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next Monthly Compliance Report. If any corrective action is disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval and the revised corrective action to obtain CBO's approval.

GEN-8 The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. 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 to 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 [1998 CBC, Section 108, Inspections]. The project owner shall retain one set of approved engineering plans, specifications and calculations at the project site or at another accessible location during the operating life of the project [1998 CBC, Section 106.4.2, Retention of Plans].

Verification: Within 15 days of the completion of any work, the project owner shall submit to the CBO, with a copy to the CPM, in the next Monthly Compliance Report, (a) 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. After storing final approved engineering plans, specifications and calculations as described above, the project owner shall submit to the CPM a letter stating that the above documents have been stored and indicate the storage location of such documents.

CIVIL-1 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, Geotechnical Report or Foundation Investigations Report required by the 1998 CBC [Appendix Chapter 33, Section 3309.5, Soils Engineering Report; Section 3309.6, Engineering Geology Report; and Chapter 18, Section 1804, Foundation Investigations].

Verification: At least 15 days (or project owner and CBO approved alternative timeframe) prior to the start of site grading the project owner shall submit the documents described above to the CBO for design review and approval.

In the next Monthly Compliance Report following the CBO's approval, the project owner shall 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 soils engineer, geotechnical engineer, or the 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 [1998 CBC, Section 104.2.4, Stop orders].

Verification: The project owner shall notify the CPM within 24 hours when earthwork and construction is stopped as a result of unforeseen adverse geologic/soil conditions. Within 24 hours of the CBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the CBO's approval.

CIVIL-3 The project owner shall perform inspections in accordance with the 1998 CBC, Chapter 1, 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 for which a grading permit is required shall be subject to inspection by the CBO.

If, in the course of inspection, it is discovered that the work is not being performed in accordance with the approved plans, the discrepancies shall be reported immediately to the resident engineer, the CBO and the CPM [1998 CBC, Appendix Chapter 33, Section 3317.7, Notification of Noncompliance]. The project owner shall prepare a written report, with copies to the CBO and the CPM, detailing all discrepancies, non-compliance items, and the proposed corrective action.

Verification: 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 for review and approval. 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 [1998 CBC, Section 109, Certificate of Occupancy].

Verification: Within 30 days of the completion of the erosion and sediment control mitigation and drainage facilities, the project owner shall submit to the CBO the 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 of any major structure or component listed in Facility Design Table 1 of Condition of Certification GEN-2, above, the project owner shall submit to the CBO for design review and approval the proposed lateral force procedures for project structures and the applicable designs, plans and drawings for project structures. Proposed lateral force procedures, designs, plans and drawings shall be those for the following items (from Table 1, above):

1. Major project structures;
2. Major foundations, equipment supports and anchorage;
3. Large field fabricated tanks;
4. Turbine/generator pedestal; and
5. Switchyard structures.

Construction of any structure or component shall not commence until the CBO has approved the lateral force procedures to be employed in designing that structure or component.

The project owner shall:

1. Obtain approval from the CBO of lateral force procedures proposed for project structures;
2. 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 [1998 CBC, Section 108.4, Approval Required];
3. 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 60 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 and installation of each structure, equipment support, or foundation [1998 CBC, Section 106.4.2, Retention of plans; and Section 106.3.2, Submittal documents]; and
4. Ensure that the final plans, calculations and specifications clearly reflect the inclusion of approved criteria, assumptions and methods used to develop the design. The final designs, plans, calculations and specifications shall be signed and stamped by the responsible design engineer [1998 CBC, Section 106.3.4, Architect or Engineer of Record].

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of any increment of construction of any structure or

component listed in **Facility Design Table 1** of Condition of Certification **GEN-2** above, 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 Energy 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 engineering LORS.

STRUC-2 The project owner shall submit to the CBO the required number of sets of the following documents related to work that has undergone CBO design review and approval:

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 structural activities requiring special inspections shall be in accordance with the 1998 CBC, Chapter 17, Section 1701, Special Inspections; Section 1701.5, Type of Work (requiring special inspection); Section 1702, Structural Observation and Section 1703, Nondestructive Testing.

Verification: 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 discrepancies and the proposed corrective action to the CBO, with a copy of the transmittal letter to the CPM [1998 CBC, Chapter 17, Section 1701.3, Duties and Responsibilities of the Special Inspector]. The NCR shall reference the Condition(s) of Certification and the 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

advise the CPM, within five days, 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 the 1998 CBC, Chapter 1, Section 106.3.2, Submittal documents and Section 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 to the CBO prior notice of the intended filing.

Verification: 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 toxic or hazardous materials exceeding amounts specified in Chapter 3, Table 3-E of the 1998 CBC shall, at a minimum, be designed to comply with the requirements of this Chapter.

Verification: At least 30 days (or project owner and CBO approved alternate timeframe) prior to the start of installation of the tanks or vessels containing the above specified quantities of toxic or hazardous materials, the project owner shall submit to the CBO for design 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 Report following completion of any inspection.

MECH-1 The project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations for each plant major piping and plumbing system listed in Facility Design Table 1, Condition of Certification **GEN-2**, above. Physical layout drawings and drawings not related to code compliance and life safety need not be submitted. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of said construction [1998 CBC, Section 106.3.2, Submittal Documents; Section 108.3, Inspection Requests; Section 108.4, Approval Required; 1998 California Plumbing Code, Section 103.5.4, Inspection Request; Section 301.1.1, Approval].

The responsible mechanical engineer shall stamp and sign all plans, drawings and calculations for the major piping and plumbing systems subject to the CBO design review and approval, and submit a signed

statement to the CBO when the said proposed piping and plumbing systems have been designed, fabricated and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards [Section 106.3.4, Architect or Engineer of Record], which may include, but not be limited to:

- American National Standards Institute (ANSI) B31.1 (Power Piping Code);
- ANSI B31.2 (Fuel Gas Piping Code);
- ANSI B31.3 (Chemical Plant and Petroleum Refinery Piping Code);
- ANSI B31.8 (Gas Transmission and Distribution Piping Code);
- Title 24, California Code of Regulations, Part 5 (California Plumbing Code);
- Title 24, California Code of Regulations, Part 6 (California Energy Code, for building energy conservation systems and temperature control and ventilation systems);
- Title 24, California Code of Regulations, Part 2 (California Building Code); and
- Specific City/County code.

The CBO may deputize inspectors to carry out the functions of the code enforcement agency [1998 CBC, Section 104.2.2, Deputies].

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of any increment of major piping or plumbing construction listed in Facility Design Table 1, Condition of Certification GEN-2 above, the project owner shall submit to the CBO for design review and approval the final plans, specifications and calculations, including a copy of the signed and stamped statement from the responsible mechanical engineer certifying compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

The project owner shall transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's inspection approvals.

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 [1998 CBC, Section 108.3, Inspection Requests].

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.

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of on-site fabrication or installation of any pressure vessel, the project owner shall submit to the CBO for design review and approval, the above listed documents, 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 transmit to the CPM, in the Monthly Compliance Report following completion of any inspection, a copy of the transmittal letter conveying the CBO's and/or Cal-OSHA inspection approvals.

MECH-3 The project owner shall submit to the CBO for design review and approval the design plans, specifications, calculations and quality control procedures for any heating, ventilating, air conditioning (HVAC) or refrigeration system. Packaged HVAC systems, where used, shall be identified with the appropriate manufacturer's data sheets.

The project owner shall design and install all HVAC and refrigeration systems within buildings and related structures in accordance with the CBC and other applicable codes. Upon completion of any increment of construction, the project owner shall request the CBO's inspection and approval of said construction. The final plans, 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 [1998 CBC, Section 108.7, Other Inspections; Section 106.3.4, Architect or Engineer of Record].

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) 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 CBC and other applicable codes, with a copy of the transmittal letter to the CPM.

ELEC-1 Prior to the start of any increment of electrical construction for electrical equipment and systems 480 volts and higher, listed below, with the exception of underground duct work and any physical layout drawings and drawings not related to code compliance and life safety, the project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations [CBC 1998, Section 106.3.2, Submittal documents]. Upon approval, the above listed plans, together with design changes and design change notices, shall remain on the site or at another accessible location for the operating life of the project. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS [1998 CBC, Section 108.4, Approval Required, and Section 108.3, Inspection Requests].

All transmission facilities (lines, switchyards, switching stations and substations) are handled in Conditions of Certification in the Transmission System Engineering section of this document.

A. Final plant design plans to include:

1. one-line diagrams for the 13.8 kV, 4.16 kV and 480 V systems; and
2. system grounding drawings.

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; and
7. lighting energy calculations.

C. The following activities shall be reported to the CPM in the Monthly Compliance Report:

1. Receipt or delay of major electrical equipment;
2. Testing or energization of major electrical equipment; and
3. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission Decision.

Verification: At least 30 days (or project owner and CBO approved alternative timeframe) prior to the start of each increment of electrical construction, the project

owner shall submit to the CBO for design review and approval the above listed documents.

The project owner shall include in this submittal a copy of the signed and stamped statement from the responsible electrical engineer attesting compliance with the applicable LORS, and shall send the CPM a copy of the transmittal letter in the next Monthly Compliance Report.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
GEOLOGICAL AND PALEONTOLOGICAL RESOURCES
CONDITIONS OF CERTIFICATION

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

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

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

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

The project owner shall ensure that the PRS obtains qualified paleontological resource monitors to monitor as he or she deems necessary on the project. Paleontologic resource monitors (PRMs) shall have the equivalent of the following qualifications:

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

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit a resume and statement of availability of its designated PRS for on-site work.

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

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

PAL-2 The project owner shall provide to the PRS and the CPM, for approval, maps and drawings showing the footprint of the power plant, construction laydown areas and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and CPM. The site grading plan and the plan and profile drawings for the utility lines would normally be acceptable for this purpose. The plan drawings should show the location, depth, and extent of all ground disturbances and can be of such a scale that ranges between 1 inch = 40 feet and 1 inch = 100 feet. If the footprint of the power plant or linear facility changes, the project owner shall provide maps and drawings reflecting these changes to the PRS and CPM.

If construction of the project will proceed in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Prior to work commencing on affected phases, the project owner shall notify the PRS and CPM of any construction phase scheduling changes.

At a minimum, the project owner shall ensure that the PRS or PRM consults weekly with the project superintendent or construction field manager to confirm area(s) to be worked during the next week, until ground disturbance is completed.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall provide the maps and drawings to the PRS and CPM.

If there are changes to the footprint of the project, revised maps and drawings shall be provided to the PRS and CPM at least 15 days prior to the start of ground disturbance.

If there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within 5 days of identifying the changes.

PAL-3 The project owner shall ensure that the PRS prepares, and the project owner shall submit to the CPM for review and approval, a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) to identify general and specific measures to minimize potential impacts to significant paleontological resources. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal

guide for monitoring, collecting and sampling activities and may be modified with CPM approval. This document shall be used as a basis for discussion in the event that on-site decisions or changes are proposed. Copies of the PRMMP shall reside with the PRS, each monitor, the project owner's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the guidelines of the Society of Vertebrate Paleontology (1995) and shall include, but not be limited to, the following:

1. Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, field work, flagging or staking; construction monitoring; mapping and data recovery; fossil preparation and collection; identification and inventory; preparation of final reports; and transmittal of materials for curation will be performed according to the PRMMP procedures;
2. Identification of the person(s) expected to assist with each of the tasks identified within the PRMMP and the Conditions of Certification;
3. A thorough discussion of the anticipated geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units;
4. An explanation of why, how, and how much sampling is expected to take place and in what units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained beds;
5. A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed schedule for the monitoring;
6. A discussion of the procedures to be followed in the event of a significant fossil discovery, including halting construction, resuming construction, and how notifications will be performed;
7. A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits;
8. Procedures for inventory, preparation, and delivery for curation of fossil materials into a retrievable storage collection in a public repository or museum, which meets the Society of Vertebrate Paleontology standards and requirements for the curation of paleontological resources; and

9. Identification of the institution that has agreed to receive any data and fossil materials collected, requirements or specifications for materials delivered for curation and how they will be met, and the name and phone number of the contact person at the institution; and,
10. A copy of the paleontological Conditions of Certification.

Verification: At least (30) days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. The PRMMP shall include an affidavit of authorship by the PRS, and acceptance of the PRMMP by the project owner evidenced by a signature.

PAL-4 Prior to ground disturbance and for the duration of construction, the project owner and the PRS shall prepare and conduct weekly CPM-approved training for all project managers, construction supervisors and workers who are involved with or operate ground disturbing equipment or tools. Workers shall not excavate in sensitive units prior to receiving CPM-approved worker training. Worker training shall consist of an initial in-person PRS training during the project kick-off for those mentioned above. Following initial training, a CPM-approved video or in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or any other areas of interest or concern.

The Worker Environmental Awareness Program (WEAP) shall address the potential to encounter paleontological resources in the field, the sensitivity and importance of these resources, and the legal obligations to preserve and protect such resources.

The training shall include:

1. A discussion of applicable laws and penalties under the law;
2. Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontologic sensitivity.
3. Information that the PRS or PRM has the authority to halt or redirect construction in the event of a discovery of unanticipated impact to a paleontological resource;
4. Instruction that employees are to halt or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM;
5. An informational brochure that identifies reporting procedures in the event of a discovery;
6. A Certification of Completion of WEAP form signed by each worker indicating that they have received the training; and
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

Verification: At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP including the brochure with the set of reporting procedures the workers are to follow.

At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to the CPM for approval if the project owner is planning on using a video for interim training.

If an alternate paleontological trainer is requested by the owner, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval. Alternate trainers shall not conduct training prior to CPM authorization.

In the Monthly Compliance Report (MCR) the project owner shall provide copies of the WEAP Certification of Completion forms with the names of those trained and the trainer or type of training offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

PAL-5 The project owner shall ensure that the PRS and PRM(s) monitors consistent with the PRMMP, all construction-related grading, excavation, trenching, and augering in areas where potentially fossil-bearing materials have been identified. In the event that the PRS determines full time monitoring is not necessary in locations that were identified as potentially fossil-bearing in the PRMMP, the project owner shall notify and seek the concurrence of the CPM.

The project owner shall ensure that the PRS and PRM(s) have the authority to halt or redirect construction if paleontological resources are encountered.

The project owner shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:

1. Any change of monitoring different from the accepted schedule presented in the PRMMP shall be proposed in a letter or email from the PRS and the project owner to the CPM prior to the change in monitoring. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.
2. The project owner shall ensure that the PRM(s) keeps a daily log of monitoring of paleontological resource activities. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.
3. The project owner shall ensure that the PRS immediately notifies the CPM of any incidents of non-compliance with any paleontological resources conditions of certification. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the Conditions of Certification.
4. For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM immediately (no later

than the following morning after the find, or Monday morning in the case of a weekend) of any halt of construction activities.

The project owner shall ensure that the PRS prepares a summary of the monitoring and other paleontological activities that will be placed in the Monthly Compliance Report. The summary will include the name(s) of PRS or PRM(s) active during the month, general descriptions of training and monitored construction activities and general locations of excavations, grading, etc. A section of the report will include the geologic units or subunits encountered; descriptions of sampling within each unit; and a list of identified fossils. A final section of the report will address any issues or concerns about the project relating to paleontologic monitoring including any incidents of non-compliance and any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the project shall include an explanation in the summary as to why monitoring was not conducted.

Verification: The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from the plan identified in the PRMMP. If there is an unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.

PAL-6 The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed including collection of fossil materials, preparation of fossil materials for analysis, analysis of fossils, identification and inventory of fossils, the preparation of fossils for curation, and the delivery for curation of all significant paleontological resource materials encountered and collected during project construction .

Verification: The project owner shall maintain in their compliance file copies of signed contracts or agreements with the designated PRS and other qualified research specialists. The project owner shall maintain these files for a period of three years after completion and approval of the CPM-approved Paleontological Resources Report (See **PAL-7**). The project owner shall be responsible to pay any curation fees charged by the museum for fossils collected and curated as a result of paleontological mitigation. A copy of the letter of transmittal submitting the fossils to the curating institution shall be provided to the CPM.

PAL-7 The project owner shall ensure preparation of a Paleontological Resources Report (PRR) by the designated PRS. The PRR shall be prepared following completion of the ground disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and submitted to the CPM for review and approval.

The report shall include, but is not limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; determinations of sensitivity and significance; and a

statement by the PRS that project impacts to paleontological resources have been mitigated.

Verification: Within 90 days after completion of ground disturbing activities, including landscaping, the project owner shall submit the Paleontological Resources Report under confidential cover to the CPM.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
HAZARDOUS MATERIALS MANAGEMENT CONDITIONS OF CERTIFICATION

HAZ-1 The project owner shall not use any hazardous material in any quantity or strength not listed in AFC Table 8.5-3 unless approved in advance by the Compliance Project Manager (CPM).

Verification: The project owner shall provide to the CPM, 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 RMP (if required by regulation) to the Certified Unified Program Authority (CUPA) and the CPM for review. A Hazardous Materials Business Plan (HMBP, which shall include the proposed building chemical inventory as per the UFC) shall also be submitted to the CUPA for review and to the CPM for review and approval prior to construction of hazardous materials storage and containment structures. The project owner shall include all recommendations of the CUPA and the CPM in the final HMBP. A copy of the final RMP, including all comments, shall be provided to the CUPA and the CPM.

Verification: At least 30 days prior to the delivery of aqueous ammonia, the project owner shall provide the final plans (RMP and HMBP) listed above to the CPM for approval.

HAZ-3 The project owner shall develop and implement a Safety Management Plan (SMP) for delivery of ammonia. The plan shall include procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of aqueous ammonia with incompatible hazardous materials.

Verification: At least 60 days prior to the first delivery of aqueous ammonia to the ammonia storage tanks, the project owner shall provide a safety management plan as described above to the CPM for review and approval.

HAZ-4 The aqueous ammonia storage facility shall be designed to either the ASME Pressure Vessel Code and ANSI K61.6, or to API 620. In either case, the storage tank shall be protected by a secondary containment basin capable of holding 150 percent of the storage volume plus the 24-hour rainfall from the 25-year storm event.

Verification: At least 60 days prior to the first delivery of aqueous ammonia to the storage tanks, the project owner shall submit final design drawings and specifications for the ammonia storage tank and the secondary containment basin to the CPM for review and approval.

HAZ-5 The project owner shall provide a covered secondary containment basin under the truck unloading pad capable of passively containing an entire truckload of aqueous ammonia plus wash water spilled during the delivery of aqueous ammonia to the storage facility.

Verification: At least 60 days prior to construction of the secondary containment basin described above, the project owner shall submit final design drawings and specifications for the secondary containment basin to the CPM for review and approval.

HAZ-6 The project owner shall ensure that no combustible or flammable material is stored within 100 feet of the sulfuric acid tank.

Verification: At least 30 days prior to the first delivery of sulfuric acid onsite, the Project Owner shall provide to the CPM for review and approval copies of the facility design drawings showing the location of the sulfuric acid storage tank and the location of any tanks, drums, or piping containing any combustible or flammable material and the route by which such materials will be transported through the facility.

HAZ-7 The project owner shall direct all vendors delivering aqueous ammonia to the site to use only tanker truck transport vehicles that meet or exceed the specifications of DOT Code MC-307.

Verification: At least 30 days prior to the first delivery of aqueous ammonia onsite, the project owner shall submit copies of the notification letter to supply vendors indicating the transport vehicle specifications to the CPM for review and approval.

HAZ-8 The project owner shall direct all vendors delivering any hazardous material to the site to use only the route approved by the CPM.

Verification: At least 60 days prior to any hazardous materials onsite, the project owner shall submit to the CPM for review and approval a copy of the letter to be mailed to the vendors. The letter shall state the required transportation route limitation.

HAZ-9 The project owner shall require that the gas pipeline undergo a complete design review and detailed inspection 30 years after initial startup and each 5 years thereafter.

Verification: At least 30 days prior to the initial flow of gas in the pipeline, the project owner shall provide an outline of a plan to accomplish a full and comprehensive pipeline design review to the CPM for review and approval. The full and complete plan shall be amended, as appropriate, and submitted to the CPM for review and approval, not later than one year before the plan is implemented by the project owner. For subsequent inspections, the project owner shall provide to the CPM for review and approval any plan amendments, or a letter indicating there are none, at least one year before implementing the subsequent inspections.

HAZ-10 After any significant seismic event in the area where surface rupture occurs within one mile of the pipeline, the gas pipeline shall be inspected by the project owner.

Verification: At least 30 days prior to the initial flow of gas in the pipeline, the project owner shall provide to the CPM for review and approval a detailed plan to accomplish a full and comprehensive pipeline inspection in the event of an earthquake. This plan shall be amended, as appropriate, and submitted to the CPM for review and approval, at least every five years.

HAZ-11 The natural gas pipeline shall be designed to meet CPUC General Order 112-D&E and 58 A standards, or any successor standards, and will be designed to meet Class III service. The pipeline shall be designed to withstand seismic stresses and will be surveyed annually for leakage. The project owner shall incorporate the following safety features into the design and operation of the natural gas pipeline in accordance with applicable code:

1. butt welds will be x-rayed and the pipeline will be pressure tested prior to the introduction of natural gas into the line;
2. the pipeline will be surveyed for leakage annually;
3. the pipeline route will be marked to prevent rupture by heavy equipment excavating in the area; and
4. valves will be installed to isolate the line if a leak occurs.

Verification: Prior to the introduction of natural gas into the pipeline, the project owner shall submit design and operation specifications of the pipelines to the CPM for review and approval.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
PUBLIC HEALTH CONDITIONS OF CERTIFICATION

LAND-1 The project owner shall comply with the minimum design and performance standards for the Public/Quasi-Public (B) District set forth in the City of Santa Clara Zoning Ordinance (Article 26, Sec.26-1 through 13).

Verification: At least 30 days prior to site mobilization of the PPP, the project owner shall submit written evidence to the Energy Commission Compliance Project Manager (CPM) that the project conforms to all applicable design and performance standards for the Industrial (B) District set forth in the City of Santa Clara Zoning Ordinance (Section 26-1 through 13). The submittal to the CPM shall include evidence of review by the City.

LAND-2 The project owner shall comply with the parking standards established by the City of Santa Clara Zoning Ordinance (Article 26, Sec. 26-12).

Verification: At least 30 days prior to site mobilization, the project owner shall submit to the CPM, written documentation, including evidence of review by the City of Santa Clara, that the project conforms to all applicable parking standards.

LAND-3 The project owner shall ensure that any signs erected (either permanent or for construction only) comply with the outdoor advertising regulations established by the City of Santa Clara zoning ordinance (Article 40, Sec. 40-1 through 17).

Verification: At least 30 days prior to start of construction, the project owner shall submit to the CPM, written documentation, including evidence of review by the City/County, that all erected signs will conform to the zoning ordinance.

LAND-4 The project owner shall provide the Director of the City of Santa Clara Planning Department for review and comment and the CPM for review and approval, descriptions of the final lay down/staging areas identified for construction of the project. The description shall include:

- a. Assessor's Parcel Number;
- b. Addresses;
- c. Land use designations;
- d. Zoning;
- e. Site plan showing dimensions;
- f. Owners name and address (if leased);
- g. Duration of lease (if leased); and,
- h. if a discretionary permit was required, two copies of all discretionary and/or administrative permits necessary for use as laydown/staging areas.

Verification: The project owner shall provide the specified documents at least 30 days prior to the start of any ground disturbance activities.

LAND-5 The project owner shall provide to the CPM for approval, a site plan with dimensions showing the locations of the proposed buildings and structures in compliance with the minimum yard area requirements (setbacks) from the property line as stipulated in the City of Santa Clara Zoning Ordinance.

Verification: At least 30 days prior to the start of construction, the project owner shall submit a site plan showing that the project conforms to all applicable yard area requirements as set forth in the City of Santa Clara Zoning Ordinance.

LAND-6 Prior to the start of construction, the project owner shall obtain the necessary approval(s) from the City of Santa Clara and complete any lot merger or lot line adjustments necessary to ensure that the proposed project site, including associated on-site facilities, improvements and buffer areas that would allow adjacent parcels to be developed to their full extent as presently zoned, will be located on a single legal lot.

Verification: At least 30 days prior to the start of construction, the Project Owner shall provide the CPM with proof of completion of the above adjustments or satisfactory evidence that no such adjustments are necessary.

LAND-7 Prior to the start of construction, the project owner shall obtain the necessary approval(s) from the City of Santa Clara and complete the street right-of-way abandonment of Pico Way that crosses the Pico power plant site.

Verification: At least 30 days prior to the start of construction, the project owner shall provide the CPM with proof of completion of the above roadway abandonment of Pico Way.

LAND-8 The project owner shall ensure that the pedestrian/bicycle pathway within the 60-foot dedicated right-of-way located at Gianera Street and Wilcox Avenue is partially realigned to accommodate the gas metering station prior to construction of the gas metering station.

Verification: At least 30 days prior to the start of construction of the gas metering station, the project owner shall provide the CPM with proof of a contract indicating that completion of the above realignment of the pedestrian/bicycle pathway will be accomplished prior to construction of the gas metering station.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

NOISE CONDITIONS OF CERTIFICATION

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within one-half mile of the site and the linear facilities, 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.

Verification: Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed, and describing the method of that notification, verifying that the telephone number has been established and posted at the site, and giving that telephone number.

NOISE COMPLAINT PROCESS

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. The project owner or authorized agent shall:

1. Use the Noise Complaint Resolution Form (below), or functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;
2. Attempt to contact the person(s) making the noise complaint within 24 hours;
3. Conduct an investigation to determine the source of noise related to the complaint;
4. If the noise is project related, take all feasible measures to reduce the noise at its source; and
5. 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 the complainant's satisfaction.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, with the local jurisdiction and the CPM,

documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 3-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.

NOISE-3 The project owner shall submit to the CPM for review and approval 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 and Cal-OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program. The project owner shall make the program available to Cal-OSHA upon request.

STEAM BLOW MANAGEMENT

NOISE-4 If a traditional, high-pressure steam blow process is employed, the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 80 dBA measured at a distance of 100 feet. The project owner shall conduct steam blows only during the hours specified in Condition of Certification NOISE-8, unless the CPM agrees to longer hours based on a demonstration by the project owner that offsite noise impacts will not cause annoyance.

If a low-pressure continuous steam blow or air blow process is employed, the project owner shall submit a description of this process, with expected noise levels and projected hours of execution, to the CPM, who shall review the proposal with the objective of ensuring that the resulting noise levels from the steam or air blows alone will not exceed 49 dBA Leq measured at the apartments at 1425 Laurelwood Road. If the low-pressure process is approved by the CPM, the project owner shall implement it in accordance with the requirements of the CPM.

Verification: At least 15 days prior to the first high-pressure steam blow, the project owner shall submit to the CPM drawings or other information describing the temporary steam blow silencer and the noise levels expected, and a description of the steam blow schedule.

At least 15 days prior to any 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 projected time schedule for execution of the process.

STEAM BLOW NOTIFICATION

NOISE-5 Prior to the first high-pressure steam blow(s), the project owner shall notify all residents, school principals or business owners 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. 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.

Verification: Project owner shall notify residents, schools and businesses at least 15 days prior to the first high-pressure steam blow(s). Within five days of notifying these entities, the project owner shall send a letter to the CPM confirming that the residents, schools and businesses have been notified of the planned steam blow activities, including a description of the method(s) of that notification.

NOISE RESTRICTIONS

NOISE-6 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation alone to exceed 45 dBA Leq measured at the apartments at 1425 Laurelwood Road, and that the noise due to plant operation will comply with the noise standards of the City of Santa Clara General Plan, or 63.3 dBA Leq at the site boundaries.

No new pure-tone components may be introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints.

- A. When the project first achieves a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at the monitoring site near the apartments at 1425 Laurelwood Road. This survey during power plant operation shall also include measurement of one-third octave band sound pressure levels at each of the above locations to ensure that no new pure-tone noise components have been introduced.
- B. If the results from the noise survey indicate that the power plant noise level (Leq) at the affected receptor exceeds the above value for any given hour during the 25-hour period, or that the noise standards of the LORS have been exceeded, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.
- C. If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: The survey shall take place within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity. Within 15 days after completing the survey, the project owner shall submit a summary report of the survey to the City of Santa Clara Planning Department, and to the CPM. Included in the survey 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. When these measures are in place, the project owner shall repeat the noise survey.

Within 15 days of completion of the new survey, the project owner shall submit to the CPM a summary report of the new noise survey, performed as described above and showing compliance with this condition.

NOISE-7 Following the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, sections 5095-5099 (Article 105) and Title 29, Code of Federal Regulations, section 1910.95. 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.

Verification: 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 and Cal-OSHA upon request.

CONSTRUCTION TIME RESTRICTIONS

NOISE-8 Noise due to high pressure steam blows shall be restricted to the times of day delineated below:

Monday through Friday 7 a.m. to 6 p.m.

Saturday 9 a.m. to 6 p.m.

Sunday and Holidays Not permissible

Holidays are defined as January 1st, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, Thanksgiving Day and the day after, and December 25th.

Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use shall be limited to emergencies.

Verification: Prior to ground disturbance, the project owner shall transmit to the CPM a statement acknowledging that the above restrictions will be observed throughout the construction of the project.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
PUBLIC HEALTH CONDITIONS OF CERTIFICATION

PUBLIC HEALTH-1 The project owner shall develop and implement a cooling tower Biocide Use, Bio-film Prevention, and Legionella Monitoring Program to ensure that the potential for bacterial growth is kept to an absolute minimum. This Program shall include weekly monitoring of biocide and chemical bio-film prevention agents, periodic maintenance of the cooling water system on a quarterly basis to remove bio-film buildup, and quarterly testing to determine the concentrations of the Legionella bacterium in the cooling water.

Verification: At least 60 days prior to the commencement of cooling tower operations, the project owner shall submit the Biocide Use, Biofilm Prevention, and Legionella Monitoring Program to the CPM for review and approval.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

SOIL AND WATER RESOURCES CONDITIONS OF CERTIFICATION

SOIL & WATER-1 Prior to beginning any site mobilization activities, the project owner shall obtain staff approval of a Sedimentation and Erosion Control Plan. The plan shall be submitted to the City of Santa Clara Public Works Department for review and comment and to the CPM for approval.

Verification: At least 45 days prior to the start of any site mobilization activities the Sedimentation and Erosion Control Plan shall be submitted to the CPM for approval and to Santa Clara County, SCVWD and the City of Santa Clara Public Works Department for review and comment. Comments from other agencies shall be submitted to the CPM. The CPM must approve the sedimentation and Erosion Control Plan prior to the initiation of any site mobilization activities.

SOIL & WATER-2 Prior to beginning site mobilization, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Construction Activity from the Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Construction Activity. The SWPPP will include final construction drainage design consistent with the City of Santa Clara requirements for grading, drainage and erosion control and specify BMPs for all on and off-site PPP project facilities. This includes providing calculations for determining the design capacity of the perimeter drainage, as well as final site drainage plans and locations of BMPs. The SWPPP shall be submitted to the City of Santa Clara Public Works Department for review and comment at least 45 days prior to start of any site mobilization activities.

Verification: At least 45 days prior to the start of any site mobilization activities, the SWPPP for Construction Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activity shall be submitted to the CPM for approval and to the City of Santa Clara Public Works Department for review and comment. Approval of the SWPPP by the CPM must be received prior to initiation of any site mobilization activities.

SOIL & WATER-3 Prior to initiating project operation, the project owner shall receive a General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity from Regional Water Quality Control Board, and obtain CPM approval of the related Storm Water Pollution Prevention Plan (SWPPP) for Industrial Activity. The SWPPP will include final operating drainage design consistent with the Santa Clara County Ordinances regarding discharge of storm water as well as the City of Santa Clara requirements for drainage and erosion control and specify BMPs and monitoring requirements for the PPP project facilities. The SWPPP shall be submitted to the City of Santa Clara Public Works Department for review and comment at least sixty days prior to initiation of project operation.

Verification: At least 60 days prior to the start of project operation, the SWPPP for Industrial Activity and a copy of the General NPDES Permit for Discharges of Storm Water Associated with Industrial Activity shall be submitted to the CPM. The SWPPP shall be submitted to the City of Santa Clara Public Works Department for review and comment at least 60 days prior to initiation of project operation. Approval of the final SWPPP plan by the CPM must be received prior to initiation of project operation.

SOIL & WATER-4 The project owner shall use tertiary-treated water supplied from South Bay Water Recycling (SBWR) as its primary water supply source for cooling, process and landscape irrigation. The project owner shall meter in-plant uses of water, distinguishing fresh water used for domestic purposes from recycled water used for cooling, process and landscape irrigation. The project owner shall prepare an annual summary, which will include the monthly range and monthly average of daily water usage in gallons per day, and total water used by the project on a monthly and annual basis in acre-feet. The annual summary shall distinguish sources and uses of water according to recycled water for cooling and process supply, fresh water source for cooling, process and irrigation supply, and for fresh water for domestic supply. For subsequent years, the annual summary shall also include the yearly range and yearly average water use by the project. The annual summary shall be submitted to the CPM as part of the annual report.

Verification: The project owner will submit as part of its periodic reports and annual compliance report a water use summary to the CPM for the life of the project.

SOIL & WATER-5 The project groundwater backup well shall be constructed according to water well construction standards, as defined in the State Water Code and the local Santa Clara Valley Water District (SCVWD) well permit Ordinance 90-1. The project well shall only be screened in the Lower Aquifer Zone. The project owner shall pay all fees associated with SCVWD Ordinance 90-1 to the agencies specified in Ordinance 90-1.

Verification: The project owner shall submit a copy of its well permit for the project groundwater backup well from the Santa Clara Valley Water District to the CPM for review and approval at least 90 days prior to the construction of the well. The project owner shall pay all fees associated with SCVWD Ordinance 90-1 to the agencies specified in Ordinance 90-1. The project backup well shall not be constructed until it is approved by the CPM.

SOIL & WATER-6 Groundwater shall be used as a backup water supply for the PPP. Groundwater shall only be used during time when the primary water supply is unavailable. The maximum annual groundwater use for the project shall not exceed 57 million gallons nor shall it exceed a period of more than 45 days each year. However, groundwater may be used for cooling and process purposes in excess of 45 days per calendar year if an unavoidable interruption of the reclaimed water supply is due to an Act of God, a natural disaster, an unforeseen emergency or other unforeseen circumstances outside the control of the project owner. If one of the aforementioned

unavoidable interruptions should occur, the CPM, project Owner, and San Jose/Santa Clara Water Pollution Control Plant shall confer and determine how to restore the reclaimed supply as soon as practicable.

Verification: The project owner shall meter, record and report project groundwater pumping annually to the CPM.

SOIL & WATER-7 The project owner shall collect groundwater quality samples from the shallow observation well to be constructed for the aquifer test program. These samples shall be analyzed for Title 22 constituents at a State-certified laboratory. The project owner shall submit a groundwater sampling report, which includes a description of the sampling procedures and laboratory results to the CPM, the RWQCB and the Santa Clara Valley Water District at least 90 days prior to the commercial operation of the project backup well.

Verification: The project owner shall submit a groundwater sampling report, which includes a description of the sampling procedures and laboratory results, to the CPM, the RWQCB and the Santa Clara Valley Water District at least 90 days prior to the commercial operation of the project backup well.

SOIL & WATER-8 The project owner shall conduct the aquifer test program as proposed by the applicant in the Statement of Work, Proposed Aquifer Test Program, Backup Water Supply Well, Pico Power Project (SVP 2003c).

The project owner shall calculate the projected vertical gradient between the Upper and Lower Aquifer Zones over the life of the project based on an annual groundwater pumping rate of 57 million gallons for a period of 45 days each year for 40 years. The aquifer test procedures, the interpretation of the test results, the raw data (in machine readable format), the calculation of aquifer properties, and the impacts analyses shall be presented and discussed in the aquifer test technical report. The aquifer test technical report shall be provided to the RWQCB and the Santa Clara Valley Water District for review, as well as the CPM for approval, at least 90 days prior to the commercial operation of the project backup well.

The aquifer test program would result in a finding of a potentially significant adverse impact caused by backup pumping if the program identifies both significant contamination and a significant gradient at the project, according to the criteria listed below.

1. Significant Contamination Criteria. Detection of contamination concentrations of Title 22 constituents above the Maximum Contaminant Levels (MCL) in the Upper Aquifer Zone.
2. Significant Gradient Criteria. A calculated vertical downward gradient between the Upper and Lower Aquifer Zones that would allow transmission of contamination over the life of the project under worst-case groundwater pumping conditions.

If there is a finding of a potential significant adverse impact, the project owner is required to submit a mitigation plan to avoid or reduce the impact to a level

less than significant. The Mitigation Plan shall be provided to the Santa Clara Valley Water District for review and comment, as well as the CPM and RWQCB for approval, at least 60 days prior to the commercial operation of the project backup well.

The project owner shall implement the approved Mitigation Plan and provide documentation of implementation to the Santa Clara Valley Water District, the CPM and the RWQCB, at least 30 days prior to the commercial operation of the backup well.

Verification: The project owner shall provide a copy of the aquifer test technical report to the CPM for review and approval at least 90 days prior to commercial operation of the project backup well. The project owner shall also provide a copy of the aquifer test technical report to the RWQCB and the Santa Clara Valley Water District for review and comment 90 days prior to commercial operation of the project backup well.

SOIL & WATER-9 Prior to the start of operation the project owner shall submit a copy of an approved Industrial Wastewater Discharge Permit for the process wastewater produced at the PPP.

Verification: The project owner shall submit a copy of the approved Industrial Wastewater Discharge Permit to the CPM at least 60 days prior to the start of operations.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
TRAFFIC AND TRANSPORTATION CONDITIONS OF CERTIFICATION

TRANS-1 The project owner shall comply with California Department of Transportation (Caltrans) and Santa Clara County limitations on vehicle sizes and weights. Overload Limit Permits will be obtained from Caltrans, as necessary. In addition, the project owner or its contractor shall obtain other necessary transportation permits from Caltrans and all relevant jurisdictions for both rail and roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any oversize and overweight transportation permits or other necessary 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), City and County of Santa Clara, and other applicable jurisdictions' limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans, City and County of Santa Clara, and all other relevant jurisdictions.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any encroachment 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-3 The project owner shall ensure that all federal and state regulations for the transport of hazardous materials are observed.

Verification: 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 materials.

TRANS-4 Following completion of project construction of the PPP and all linear facilities, the project owner shall restore Space Park Drive, Kenneth, Duane, and Lafayette Streets, and any other adversely affected road to their pre-construction condition.

Prior to start of site preparation or earth moving activities, the project owner shall photograph, videotape, or digitally record images of Duane Street from Lafayette Street to Kenneth Street, Lafayette Street from Montague Expressway to Central Expressway, Kenneth Street from Duane Street to Space Park Drive, and Space Park Drive from Kenneth Street to Scott Boulevard. The project owner shall provide the CEC Compliance Project Manager (CPM), Santa Clara County, City of Santa Clara and Caltrans (as necessary) a copy of these images. At least 60 days prior to start of site preparation or earth moving activities, the project

owner shall also notify Caltrans about the schedule for project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction related activities associated with other projects.

Verification: Within 30 days after completion of project construction, the project owner shall meet with the CPM, Santa Clara County, City of Santa Clara and Caltrans (as needed) to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near original condition as possible. The project owner shall provide to the CPM a letter from Santa Clara County, City of Santa Clara and CalTrans (as necessary) stating their satisfaction with the road improvements.

TRANS-5 During construction of the power plant and all related facilities, the project owner shall enforce a policy that all project-related parking occurs in designated parking areas.

Verification: At least 45 days prior to start of site preparation or earth moving activities, the project owner shall submit a parking and staging plan for all phases of project construction to the City of Santa Clara for review and comment, and to the CPM for review and approval.

TRANS-6 The project owner shall develop a construction traffic control plan that outlines what measures need to be taken on a month-to-month basis with input from the City of Santa Clara, Caltrans and the CPM. Specifically, the construction Contractor will be required to prepare a traffic control plan and implementation program that addresses timing of heavy equipment and building material deliveries; employee trip reduction; and signing, lighting, and traffic control device placement. The following specific best management practices will be incorporated into the construction traffic control plan:

- Truck loads will not exceed legal limits.
- Loads of material (i.e. excavated soil) will either be enclosed by vehicle covers, wetted, or centered in the truck to prevent wind blowing materials out of the truck.
- Trucks and trailers will be swept clean or hosed after unloading and before entering a public roadway.
- Mufflers, brakes, and all loose items on trucks will be maintained to minimize noise and ensure safe operation.
- Truck operations will be kept to quietest operating speeds. Drivers will be advised to avoid downshifting while driving through or near residential communities.

Verification: At least 30 days prior to start of site preparation or earth moving activities, the project owner shall provide the plan to the City of Santa Clara and Caltrans for review and comment, and to the CPM for review and approval.

TRANS-7 During construction and operation of the PPP, the project owner and contractors shall enforce a policy that all project-related traffic traveling north on Lafayette Street avoid turning left across traffic onto Duane Street, and from turning left onto Lafayette Street from Duane Street. Staff has identified two alternate routes for reaching the site that avoid the left turn off at Lafayette Street.

The project owner and construction contractor will need to require that the construction workforce and truck drivers choose among alternate three routes.

1. The first involves using Central Expressway or San Tomas to Scott Boulevard followed by a turn onto Space Park Drive, a left turn onto Kenneth Street, and a right turn onto Duane Street and proceed east to the site.
2. The second route involves going south on De La Cruz to Central Expressway and turning right and proceeding west to Scott Boulevard, followed by a right turn on Space Park Drive and proceeding in the same manner identified in the first route.
3. The third route involves going north on Lafayette Street from either the westbound or eastbound lanes on Central Avenue, followed by a left turn onto Comstock and then an immediate right turn into the southern perimeter gate for the PPP site. This route will only be used to transport heavy loads by truck from the rail transfer site to the project. The deliveries will require a flagman and will only occur during early morning hours (3 a.m. to 6 a.m.)

Verification: At least 60 days prior to start of site preparation or earth moving activities, the project owner shall provide a traffic routing plan for all phases of project construction and operation to City of Santa Clara and Caltrans for review and comment, and to the CPM for review and approval.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
TRANSMISSION LINE SAFETY AND NUISANCE CONDITIONS OF CERTIFICATION

TLSN-1 The project owner shall measure the strengths of the line electric and magnetic fields from the 115 kV Scott-Kifer line to be utilized to allow for evaluation of the project-related field additions together with total exposure levels. Measurements shall be made at representative points (on-site and along the line route) according to IEEE measurement protocols and as necessary to identify the maximum field exposures possible during operations. Staff would assess the need to recommend further mitigation through comparison with fields from SVP and PG&E lines of the same voltage and current-carrying capacity. Since undergrounding would yield the lowest magnetic field reduction possible, it would not be necessary for specific measurements to be made with respect to the existing lines that are proposed for undergrounding.

Verification: SVP shall file copies of the pre- and post-energization measurements with the CPM within 60 days after completion of the measurements.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
TRANSMISSION SYSTEM ENGINEERING CONDITIONS OF CERTIFICATION

- TSE-1** The owner of the power plant switchyard and outlet facilities shall ensure that the design, construction, and operation of the proposed transmission facilities will conform to all applicable LORS including the requirements a) through g) listed below.
- a. The PPP switchyard shall consist of three 115 kV circuit breakers.
 - b. The power plant switchyard and outlet lines shall meet or exceed the electrical, mechanical, civil, and structural requirements of SVP interconnection standards, CPUC General Orders 95 (GO-95) or National Electric Safety Code (NESC), Title 8 of the California Code and Regulations, Articles 35, 36, and 37 of the "High Voltage Electric Safety Orders," National Electric Code (NEC), and related industry standards.
 - c. Breakers and buses in the power plant switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis.
 - d. Outlet line crossings and line parallels with transmission and distribution facilities shall be coordinated with the transmission line owner and comply with the owner's standards.
 - e. Termination facilities at the plant switchyard shall comply with applicable SVP interconnection standards.
 - f. The project conductors shall be sized to accommodate the full output from the project.
 - g. The owner of the power plant switchyard and outlet facilities shall provide any modified Detailed Facility Interconnection Study (DFIS) including a description of facility upgrades, operational mitigation measures, and/or Remedial Action Scheme (RAS) or Special Protection System (SPS) sequencing and timing if applicable.

Verification: At least 60 days prior to the start of rough grading of transmission facilities, the owner of the power plant switchyard and outlet facilities shall submit to the CPM for approval:

- a. Electrical one line diagrams signed and sealed by a registered professional electrical engineer in responsible charge (or other approval acceptable to the CPM), a route map, and an engineering description of equipment and the configurations covered by the requirements a) through g) above.
- b. The Detailed Facilities Study (if modified) (if it has not otherwise previously been provided to the Energy Commission) and a signed letter from the owner of the power plant Switchyard and Outlet facilities stating that the mitigation measures are acceptable. Substitution of equipment and substation configurations shall be identified and justified by the project owner for CPM approval.

TSE-2 The owner of the power plant switchyard and outlet facilities shall request approval to implement any changes that may not conform to the requirements a) through g) of **TSE-1**, and have not received CPM approval. 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 substation configurations shall not begin without prior written approval of the changes by the CPM.

Verification: At least 60 days prior to the construction of transmission facilities, the owner of the power plant switchyard and outlet facilities shall inform the CPM of any impending changes that may not conform to requirements a) through g) of **TSE-1** and request approval to implement such changes.

TSE-3 The project owner shall provide notice to the Cal-ISO prior to synchronizing the facility with the California transmission system:

- a. At least one week prior to synchronizing the facility with the grid for testing, provide the Cal-ISO a letter stating the proposed date of synchronization; and
- b. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the Cal-ISO Outage Coordination Department.

Verification: The project owner shall provide copies of the Cal-ISO letter to the CPM when it is sent to the Cal-ISO one week prior to initial synchronization with the grid. The project owner shall contact the Cal-ISO Outage Coordination Department, Monday through Friday, between the hours of 0700 and 1530 at (916) 351-2300 at least one business day prior to synchronizing the facility with the grid for testing. A report of conversation with the Cal-ISO Outage Coordination Department shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

TSE-4 The owner of the power plant switchyard and outlet facilities 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 GO-95 or NESC, Title 8 of the California Code of Regulations, Articles 35, 36, and 37 of the "High Voltage Electric Safety Orders," SVP's interconnection standards, NEC, related industry standards and these conditions. In case of non-conformance, the project owner shall inform the CPM in writing, within 10 days of discovering such non-conformance, and describe the proposed corrective actions.

Verification: Within 60 days after first synchronization of the project, the project owner shall transmit to the CPM:

- a. "As built" engineering description(s) and one-line drawings of the electrical portion of the facilities signed and sealed by the registered electrical engineer in responsible charge; and a statement attesting to conformance with CPUC GO-95

or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders," and applicable interconnection standards, NEC, related industry standards, and these conditions shall be provided concurrently.

- b. An "as built" engineering description of the mechanical, structural, and civil portion of the transmission facilities signed and sealed by the registered engineer in responsible charge or acceptable alternative verification. "As built" drawings of the mechanical, structural, and civil portion of the transmission facilities shall be maintained at the power plant and made available, if requested, for CPM audit as set forth in the "Compliance Monitoring Plan."
- c. A summary of inspections of the completed transmission facilities, and identification of any nonconforming work and corrective actions taken, signed and sealed by the responsible registered engineer in charge.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

VISUAL RESOURCES CONDITIONS OF CERTIFICATION

- VIS-1** The project owner shall ensure that visual impacts of construction of the sound walls, gas pipeline, metering station, and underground transmission line (if relocated offsite) are adequately mitigated. To accomplish this, the project owner shall require the following as a condition of contract with its contractors involved in constructing the sound walls, gas pipeline, metering station, and underground transmission line:
- a. The construction site and staging and material and equipment storage areas for gas metering station construction shall be visually screened from view from adjacent residences with temporary opaque or semi-opaque fencing. Fencing will be of an appropriate design and color, as determined by the Energy Commission Compliance Project Manager (CPM).
 - b. All evidence of sound wall, gas pipeline and offsite underground transmission line construction activities, including ground disturbance in staging and storage areas, shall be removed, and all disturbed areas shall be remediated to an original or improved condition upon completion of construction, including the replacement of any vegetation or paving removed during construction. Any replacement plantings shall be monitored for a period of three years to ensure survival. During this period, all dead plant material shall be replaced.

The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a specific screening and restoration plan whose proper implementation will satisfy these requirements.

The project owner shall not implement the screening and restoration plan until receiving written approval from the CPM.

Verification: At least 60 days prior to construction of the gas metering station, the project owner shall submit a temporary visual screening plan to the CPM for review and approval and to the City of Santa Clara for review and comment.

At least 60 days prior to construction of the perimeter sound walls, gas pipeline and metering station, and offsite underground transmission line, the project owner shall submit restoration plans to the CPM for review and approval and to the City of Santa Clara for review and comment.

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 installing the temporary screening that it is ready for inspection.

The project owner shall notify the CPM within seven days after completing surface restoration that the restored areas are ready for inspection.

VIS-2 Prior to commercial operation, the project owner shall treat the surfaces of all project structures, buildings, and walls visible to the public such that: their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create excessive glare; and they are designed consistent with the City of Santa Clara Community Design Guidelines. The project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment, a specific treatment and design plan, the proper implementation of which will satisfy these requirements. The submittal to the CPM shall include the City's comments. The treatment and design plan shall include:

- a. Specification, and 11" x 17" color photo simulations (KOPs 2 and 5) at life size scale when viewed at 18 inches, of the treatment/design proposed for use on project structures, including structures treated during manufacture;
- b. A list of each major project structure, piping, building, tank, transmission line tower and/or pole, and wall and/or fence specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation). The transmission line structures shall have a neutral gray finish. The conductors shall be non-specular conductors and non-reflective, and the insulators shall be non-refractive;
- c. Two sets of brochures and/or color chips for each proposed color;
- d. If practicable, samples at least 5" by 7" of each proposed treatment and color on each material to which they would be applied that would be visible to the public;
- e. A detailed schedule for completion of the treatment; and
- f. A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until the project owner receives notification of approval of the treatment plan by the CPM.

Verification: The project owner shall submit its proposed treatment and design plan to the CPM and the City of Santa Clara at least 60 days prior to ordering the first structures that are color treated during manufacture.

If the CPM notifies the project owner that any revisions of the plan are needed, the project owner shall submit to the CPM a revised plan within 30 days after that notification.

Prior to commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

VIS-3 The project owner shall prepare and implement a landscape plan to substantially screen views of the power plant and gas metering station and to soften views of perimeter sound walls. Landscaping shall consist of a mix of trees, shrubs, vines, and groundcovers. Fast growing evergreen species shall be used to ensure that maximum screening of the project is achieved as quickly as possible and is effective year-around. Landscaping shall be provided along Lafayette Street and Duane Avenue of sufficient density and height, to substantially screen project structures from southbound views from Lafayette Street within five years after completion of construction. Landscaping shall be installed around the gas metering station to substantially screen it from view from residences at Gianera Street and Wilcox Avenue. Suitable irrigation shall be installed to ensure survival of all plantings. Landscaping shall be installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines.

The project owner shall submit a landscaping plan to the CPM for review and approval and to the City of Santa Clara Architectural Committee (or other appropriate entity) for review and comment. The submittal to the CPM shall include the City's comments. The plan shall include:

- a. 11"x17" color photo simulations of the proposed landscaping for the power plant, as viewed from KOPs 2, 5 and 6, and for the gas metering station, as viewed from the residences to the west, at 5 years after planting and at maturity;
- b. A detailed list of plants to be used, specifying their rates of growth and times to maturity and their proposed size and age at planting;
- c. Maintenance procedures, including any needed irrigation and a plan for routine annual or semi-annual debris removal for the life of the project; and
- d. A procedure for monitoring for and replacement of unsuccessful plantings for the life of the project.

The project owner shall not implement the plan until the project owner receives approval of the submittal from the CPM.

Verification: The project owner shall submit the landscaping plan prior to commercial operation and at least 90 days prior to installing the landscaping.

If the CPM notifies the project owner that revisions of the submittal are needed, 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 landscaping that the plantings and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in each Annual Compliance Report.

VIS-4 The project owner shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. Lighting shall be installed consistent with the City of Santa Clara Zoning Ordinance and Community Design Guidelines. To meet these requirements the project owner shall ensure that:

- a. Lighting shall be designed so 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 the lighting shall be such that the luminescence or light source is shielded to reduce light trespass outside the project boundary while taking into consideration security concerns.
- b. All lighting shall be of minimum necessary brightness consistent with worker safety and security concerns;
- c. High illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have switches or motion detectors to light the area only when occupied; and
- d. Plant operations staff shall record all lighting complaints received and document the resolution of those complaints. All records (following the general format of that in the "Lighting Complaint Resolution Form", Exhibit 29, p. 4.11 – 51, Visual Resources Appendix VR-3 of the Staff Assessment, Part I) of lighting complaints shall be kept in the on-site compliance file.

Verification: At least 90 days prior to ordering any permanent exterior lighting, the project owner shall contact the CPM to arrange a meeting to discuss the documentation required in the lighting mitigation plan.

At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and approval and to the City of Santa Clara for review and comment a plan that describes the measures to be used and demonstrates that the requirements of the condition will be satisfied. The submittal to the CPM shall include the City's comments. The project owner shall not order any exterior lighting until it receives CPM approval of the lighting mitigation plan.

Prior to commercial operation, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report for that year.

VIS-5 To the extent required by the City of Santa Clara Community Design Guidelines, the project owner shall minimize the visibility of mechanical equipment located on top of the heat recovery steam generator (HRSG) units from public rights-of-way and nearby properties. The color or colors of any screening materials shall minimize visual intrusion and contrast by blending with the landscape and other project structure colors.

The project owner shall develop a plan for screening or otherwise minimizing the visibility of mechanical equipment located on the HRSG units for CPM approval to ensure that the treatment is effective and does not unduly contrast with the surrounding landscape. The project owner shall also submit the plan to the City of Santa Clara Architectural Committee (or other appropriate entity) for review and comment. The submittal to the CPM shall include the City's comments. The plan shall include:

- a. Specification, and 11" x 17" color photo simulations at life-size scale as seen from a northbound viewpoint on Lafayette Street (between KOPs 1 and 2), Highway 101 (KOP 4), and Raymond Street (KOP 5) of the proposed measure or measures to reduce the visibility of the equipment;
- b. A detailed schedule for completion of the measures; and,
- c. A procedure to ensure proper maintenance of the measures for the life of the project.

The project owner shall not implement the plan until approved by the CPM.

Verification: At least 45 days prior to start of construction of the HRSG, the project owner shall submit the plan for reducing the visibility of the HRSG equipment to the CPM for review and approval.

If the CPM notifies the project owner of any revisions that 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.

Not less than 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the screening measures are ready for inspection.

The project owner shall provide a status report regarding maintenance of the screening measures in the Annual Compliance Report.

VIS-6 The project owner shall reduce cooling tower visible vapor plumes through the use of a dry-cooling section that has a stipulated plume abatement design point of 35 degrees Fahrenheit and 85 percent relative humidity. An automated control system will be used to ensure that plumes are abated to the maximum extent possible for the stipulated design point.

Verification: At least 30 days prior to construction of the cooling tower, the project owner shall provide to the CPM for review and approval the specifications for the automated control systems and related systems and sensors that will be used to ensure maximum plume abatement from the dry-cooling section of the cooling tower.

VIS-7 The project owner shall design project signs using non-reflective materials and unobtrusive colors. The project owner shall ensure that trash disposal areas are fully screened from view from public rights-of-way. The project owner shall ensure that signs and trash disposal areas are installed consistent with the City of Santa Clara Zoning Ordinance Section Sec. 26-13 and the Community Design Guidelines. The design of any signs required by safety regulations shall conform to the criteria established by those regulations.

Verification: At least 60 days prior to installing signs, and construction of trash disposal areas, the project owner shall provide information to the City of Santa Clara for review and comment, and to the CPM for review and approval demonstrating that the requirements of the condition will be met. The submittal to the CPM shall include the City's comments.

The project owner shall not install signs or construct trash disposal areas until the project owner receives approval of the submittal from the CPM.

If the CPM notifies the project owner that revisions 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.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

WASTE MANAGEMENT CONDITIONS OF CERTIFICATION

WASTE-1 The project owner shall provide the resume of a Registered Professional Engineer or Geologist, who shall be available for consultation during soil excavation and grading activities, to the Compliance Project Manager (CPM) for review and approval. The resume shall show experience in remedial investigation and feasibility studies.

The Registered Professional Engineer or Geologist shall be given full authority to oversee any earth moving activities that have the potential to disturb contaminated soil.

Verification: At least 30 days prior to the start of site mobilization the project owner shall submit the resume of the designated Registered Professional Engineer or Geologist to the CPM.

WASTE-2 If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the Registered Professional Engineer or Geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and file a written report to the project owner and CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the Registered Professional Engineer or Geologist, significant remediation may be required, the project owner shall contact (as appropriate) representatives of the San Francisco Regional Water Quality Control Board, the City of Santa Clara Fire Department, and the Berkeley Office of the California Department of Toxic Substances Control for guidance and possible oversight.

Verification: The project owner shall submit any final reports filed by the Registered Professional Engineer or Geologist to the CPM within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-3 The project owner shall obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to generating any hazardous waste.

Verification: The project owner shall keep its copy of the identification number on file at the project site and notify the CPM via the Monthly Compliance Report of its receipt.

WASTE-4 Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

Verification: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the manner in which project-related wastes are managed.

WASTE-5 The project owner shall prepare a Construction Waste Management Plan and an Operation Waste Management Plan for all wastes generated during construction and operation of the facility, respectively, and shall submit both plans to the CPM for review and approval. The plans shall contain, at a minimum, the following:

- A description of all waste streams, including projections of rates and amounts generated and hazard classifications; and
- Methods of managing each type of 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.

Verification: No less than 30 days prior to the start of site mobilization, the project owner shall submit the Construction Waste Management Plan to the CPM. The operation waste management plan shall be submitted no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions within 20 days of notification by the CPM.

In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to the planned management methods.

WASTE-6 The project owner shall provide soil management workplan to the CPM providing the methods, which will be used to properly handle or dispose of soil, which may contain contaminants. The workplan will discuss:

1. landfill facility disposal options,
2. acceptance criteria, and
3. soil contaminant characterization requirements, including a protocol for testing for chlorinated pesticides and metals from historical pesticide use at the site.

Verification: The project owner shall submit the soil management workplan to the CPM for approval 60 days prior to any earth moving activities, including those associated with site mobilization, ground disturbance, or grading as defined in the general conditions of certification.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)
WORKER SAFETY AND FIRE PROTECTION CONDITIONS OF CERTIFICATION

WORKER SAFETY-1 The project owner shall submit to the CPM a copy of the Project Construction Injury and Illness Prevention Program, containing the following:

- A Construction Safety Program;
- A Construction Personal Protective Equipment Program;
- A Construction Exposure Monitoring Program;
- A Construction Emergency Action Plan; and
- A Construction Fire Protection and Prevention Plan.

The Safety Program, the Personal Protective Equipment Program, and the Exposure Monitoring Program shall be submitted to the CPM for review and comment concerning compliance of the program with all applicable Safety Orders. The Construction Fire Protection and Prevention Plan and Emergency Action Plan shall be submitted to the City of Santa Clara Fire Department for review and comment prior to submittal to the CPM.

Verification: At least 30 days prior to site mobilization, the project owner shall submit to the CPM for review and approval a copy of the Project Construction Injury and Illness Prevention Program. The project owner shall provide a letter from the City of Santa Clara Fire Department stating that they have reviewed and commented on the Construction Fire Protection and Prevention Plan Emergency Action Plan.

WORKER SAFETY-2 The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following:

- An Operation Injury and Illness Prevention Plan;
- An Emergency Action Plan;
- Hazardous Materials Management Program;
- Operations and Maintenance Safety Program;
- Fire Protection and Prevention Program (Cal Code Regs., tit. 8, § 3221); and;
- Personal Protective Equipment Program (Cal Code Regs., tit. 8, §§ 3401-3411).

The Operation Injury and Illness Prevention Plan, Emergency Action Plan, and Personal Protective Equipment Program shall be submitted by the project owner to the 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 also be

submitted by the project owner to the City of Santa Clara Fire Department for review and acceptance.

Verification: 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 Operations and Maintenance Safety & Health Program. It shall incorporate Cal/OSHA Consultation Service's comments, stating that they have reviewed and accepted the specified elements of the proposed Operations and Maintenance Safety and Health Plan.

DONALD VON RAESFELD POWER PLANT (02-AFC-03C)

COMPLIANCE AND CLOSURE CONDITIONS OF CERTIFICATION

GENERAL CONDITIONS INCLUDING COMPLIANCE MONITORING AND CLOSURE PLAN

The project General Conditions Including Compliance Monitoring and Closure Plan (Compliance Plan) have been established as required by Public Resources Code section 25532. The plan provides a means for assuring that the facility is constructed, operated and closed in conjunction with air and water quality, public health and safety, environmental and other applicable regulations, guidelines, and conditions adopted or established by the Energy Commission and specified in the written decision on the Application for Certification or otherwise required by law.

The Compliance Plan is composed of the following elements:

1. General conditions that:
 - set forth the duties and responsibilities of the Compliance Project Manager (CPM), the project owner, delegate agencies, and others;
 - set forth the requirements for handling confidential records and maintaining the compliance record;
 - state procedures for settling disputes and making post-certification changes;
 - state the requirements for periodic compliance reports and other administrative procedures that are necessary to verify the compliance status for all Energy Commission approved conditions; and
 - establish requirements for facility closure plans.
2. Specific Conditions of Certification:
 - Specific Conditions of Certification that follow each technical area contain the measures required to mitigate any and all potential adverse project impacts associated with construction, operation and closure to an insignificant level. Each specific Condition of Certification also includes a verification provision that describes the method of verifying that the condition has been satisfied.

GENERAL CONDITIONS OF CERTIFICATION

DEFINITIONS

To ensure consistency, continuity and efficiency, the following terms, as defined, apply to all technical areas, including Conditions of Certification:

SITE MOBILIZATION

Moving of trailers and related equipment onto the site, usually accompanied by minor ground disturbance, grading for the trailers and limited vehicle parking, trenching for

construction utilities, installing utilities, grading for an access corridor, and other related activities. Ground disturbance, grading, etc. for site mobilization are limited to the portion of the site necessary for placing the trailers and providing access and parking for the occupants. Site mobilization is for temporary facilities and is therefore not considered construction.

GROUND DISTURBANCE

On-site activity that results in the removal of soil or vegetation, boring, trenching or alteration of the site surface. This does not include driving or parking a passenger vehicle, pickup truck, or other light vehicle, or walking on the site.

GRADING

On-site activity conducted with earth-moving equipment that results in alteration of the topographical features of the site such as leveling, removal of hills or high spots, or moving of soil from one area to another.

CONSTRUCTION

[From section 25105 of the Warren-Alquist Act.] On-site work to install permanent equipment or structures for any facility. Construction does not include the following:

- a. The installation of environmental monitoring equipment.
- b. A soil or geological investigation.
- c. A topographical survey.
- d. Any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility.
- e. Any work to provide access to the site for any of the purposes specified in a., b., c., or d.

START OF COMMERCIAL OPERATION

For compliance monitoring purposes, “commercial operation” begins after the completion of start-up and commissioning, where the power plant has reached reliable steady-state production of electricity at the rated capacity. For example, at the start of commercial operation, plant control is usually transferred from the construction manager to the plant operations manager.

COMPLIANCE PROJECT MANAGER (CPM) RESPONSIBILITIES

The CPM will oversee the compliance monitoring and shall be responsible for:

1. ensuring that the design, construction, operation, and closure of the project facilities is in compliance with the terms and conditions of the Commission
2. Decision;
3. resolving complaints;

4. processing post-certification changes to the conditions of certification, project description, and ownership or operational control;
5. documenting and tracking compliance filings; and,
6. ensuring that the compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies and the Energy Commission when handling disputes, complaints and amendments.

All project compliance submittals are submitted to the CPM for processing. Where a submittal required by a Condition of Certification requires CPM approval, the approval will involve all appropriate Commission staff and management.

The Energy Commission has established a toll-free compliance telephone number of 1-800-858-0784 for the public to contact the Energy Commission about power plant construction or operation-related questions, complaints or concerns.

PRE-CONSTRUCTION AND PRE-OPERATION COMPLIANCE MEETING

The CPM may schedule pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings will be to assemble both the Energy Commission's and the project owner's technical staff to review the status of all pre-construction or pre-operation requirements contained in the Energy Commission's conditions of certification to confirm that they have been met, or if they have not been met, to ensure that the proper action is taken. In addition, these meetings shall ensure, to the extent possible, that Energy Commission conditions will not delay the construction and operation of the plant due to oversight or inadvertence and to preclude any last minute, unforeseen issues from arising. Pre-construction meetings held during the certification process must be publicly noticed unless they are confined to administrative issues and processes.

ENERGY COMMISSION RECORD

The Energy Commission shall maintain as a public record, in either the Compliance file or Docket file, for the life of the project (or other period as required):

1. all documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
2. all monthly and annual compliance reports filed by the project owner;
3. all complaints of noncompliance filed with the Energy Commission; and,
4. all petitions for project or condition changes and the resulting staff or Energy Commission action taken.

PROJECT OWNER RESPONSIBILITIES

The project owner is responsible for ensuring that the general compliance conditions and all of the other conditions of certification that appear in the staff assessment sections are satisfied. The general compliance conditions regarding post-certification changes specify measures that the project owner must take when requesting changes

in the project design, conditions of certification, or ownership. Failure to comply with any of the conditions of certification or the general compliance conditions may result in reopening of the case and revocation of Energy Commission certification, an administrative fine, or other action as appropriate. A summary of the General Conditions of Certification is included as Compliance Table 1 at the conclusion of this section. The designation after each of the following summaries of the General Compliance Conditions (**COM-1**, **COM-2**, etc.) refers to the specific General Compliance Condition contained in Compliance Table 1.

Construction Milestones, Compliance Condition of Certification 1 (COM-1)

The Monthly Compliance Report is the vehicle for notifying the CPM of applicable construction milestones, or for amending previously established milestones, for pre-construction and construction phases of the project. The project owner may also send a letter, an e-mail message, or make a phone call to notify the CPM of planned changes to the milestones.

I. ESTABLISH PRE-CONSTRUCTION MILESTONES TO ENABLE START OF CONSTRUCTION WITHIN ONE YEAR OF CERTIFICATION

1. Obtain site control
2. Obtain financing
3. Mobilize site
4. Begin rough grading for permanent structures (start of construction)

II. ESTABLISH CONSTRUCTION MILESTONES FROM DATE OF START OF CONSTRUCTION

1. Begin pouring major foundation concrete
2. Begin installation of major equipment
3. Complete installation of major equipment
4. Begin gas pipeline construction
5. Complete gas pipeline interconnection
6. Begin T-line construction
7. Complete T-line interconnection
8. Begin commercial operation within three years of the Commission's final decision

The CPM will negotiate the above-cited pre-construction and construction milestones with the project owner based on an expected schedule of construction. The CPM may agree to modify the final milestones from those listed above at any time prior to or during construction if the project owner demonstrates good-cause for not meeting the originally-established milestones.

III. A FINDING THAT THERE IS GOOD CAUSE FOR FAILURE TO MEET MILESTONES WILL BE MADE IF ANY OF THE FOLLOWING CRITERIA ARE MET:

1. The change in any milestone does not change the established commercial operation date milestone.
2. The milestone will be missed due to circumstances beyond the project owner's control.
3. The milestone will be missed, but the project owner demonstrates a good-faith effort to meet the project milestone.
4. The milestone will be missed due to unforeseen natural disasters or acts of God that prevent timely completion of the milestones.
5. The milestone will be missed due to requirements of the California ISO to maintain existing generation output.

Unrestricted Access, COM-2

The CPM, responsible Energy Commission staff, and delegate agencies or consultants shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

Compliance Record, COM-3

The project owner shall maintain project files onsite or at an alternative site approved by the CPM, for the life of the project unless a lesser period of time is specified by the conditions of certification. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files.

Compliance Verification Submittals, COM-4

Each condition of certification is followed by a means of verification. The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions. The verification procedures, unlike the conditions, may be modified as necessary by the CPM, and in most cases without full Energy Commission approval.

Verification of compliance with the conditions of certification can be accomplished by:

1. reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
2. providing appropriate letters from delegate agencies verifying compliance;

3. Energy Commission staff audits of project records; and/or
4. Energy Commission staff inspections of mitigation or other evidence of mitigation.

Verification lead times (e.g., 90, 60 and 30-days) associated with start of construction may require the project owner to file submittals during the certification process, particularly if construction is planned to commence shortly after certification.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal. The project owner shall also identify those submittals not required by a condition of certification with a statement such as: "This submittal is for information only and is not required by a specific condition of certification." When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal.

The project owner is responsible for the delivery and content of all verification submittals to the CPM, whether such condition was satisfied by work performed by the project owner or an agent of the project owner.

All submittals shall be addressed as follows:

Compliance Project Manager
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

If the project owner desires Energy Commission staff action by a specific date, they shall so state in their submittal and include a detailed explanation of the effects on the project if this date is not met.

Pre-Construction Matrix and Tasks Prior to Start of Construction COM-5

Prior to commencing construction a compliance matrix addressing only those conditions that must be fulfilled before the start of construction shall be submitted by the project owner to the CPM. This matrix will be included with the project owner's first compliance submittal or prior to the first pre-construction meeting, whichever comes first. It will be in the same format as the compliance matrix referenced above.

Construction shall not commence until the pre-construction matrix is submitted, all pre-construction conditions have been complied with, and the CPM has issued a letter to the project owner authorizing construction. Various lead times (e.g., 30, 60, 90 days) for submittal of compliance verification documents to the CPM for conditions of certification are established to allow sufficient staff time to review and comment and, if necessary, allow the project owner to revise the submittal in a timely manner. This will ensure that project construction may proceed according to schedule.

Failure to submit compliance documents within the specified lead-time may result in delays in authorization to commence various stages of project development.

Project owners frequently anticipate starting project construction as soon as the project is certified. In those cases, it may be necessary for the project owner to file compliance submittals prior to project certification if the required lead-time for a required compliance event extends beyond the date anticipated for start of construction. It is also important that the project owner understand that the submittal of compliance documents prior to project certification is at the owner's own risk. Any approval by Energy Commission staff is subject to change based upon the Final Decision

Compliance Reporting

There are two different compliance reports that the project owner must submit to assist the CPM in tracking activities and monitoring compliance with the terms and conditions of the Commission Decision. During construction, the project owner or authorized agent will submit Monthly Compliance Reports. During operation, an Annual Compliance Report must be submitted. These reports, and the requirement for an accompanying compliance matrix, are described below. The majority of the conditions of certification require that compliance submittals be submitted to the CPM in the monthly or annual compliance reports.

Compliance Matrix, COM-6

A compliance matrix shall be submitted by the project owner to the CPM along with each monthly and annual compliance report. The compliance matrix is intended to provide the CPM with the current status of all compliance conditions in a spreadsheet format. The compliance matrix must identify:

1. the technical area;
2. the condition number;
3. a brief description of the verification action or submittal required by the condition;
4. the date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);
5. the expected or actual submittal date;
6. the date a submittal or action was approved by the Chief Building Official (CBO), CPM, or delegate agency, if applicable; and
7. the compliance status of each condition, e.g., "not started," "in progress" or "completed" (include the date).

Satisfied conditions do not need to be included in the compliance matrix after they have been identified as satisfied in at least one monthly or annual compliance report.

Monthly Compliance Report, COM-7

The first Monthly Compliance Report is due one month following the Energy Commission business meeting date upon which the project was approved, unless otherwise agreed to by the CPM. The first Monthly Compliance Report shall include an initial list of dates for each of the events identified on the Key Events List. The Key Events List Form is found at the end of this section.

During pre-construction and construction of the project, the project owner or authorized agent shall submit an original and five copies of the Monthly Compliance Report within 10 working days after the end of each reporting month. Monthly Compliance Reports shall be clearly identified for the month being reported. The reports shall contain, at a minimum:

1. a summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule;
2. documents required by specific conditions to be submitted along with the Monthly Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Monthly Compliance Report;
3. an initial, and thereafter updated, compliance matrix showing the status of all conditions of certification and pre-construction and construction milestones (fully satisfied conditions do not need to be included in the matrix after they have been reported as closed);
4. a list of conditions and milestones that have been satisfied during the reporting period, and a description or reference to the actions that satisfied the condition;
5. a list of any submittal deadlines that were missed, accompanied by an explanation and an estimate of when the information will be provided;
6. a cumulative listing of any approved changes to conditions of certification;
7. a listing of any filings submitted to, or permits issued by, other governmental agencies during the month;
8. a projection of project compliance activities scheduled during the next two months. The project owner shall notify the CPM as soon as any changes are made to the project construction schedule that would affect compliance with conditions of certification or milestones;
9. a listing of the month's additions to the on-site compliance file;
10. any requests to dispose of items that are required to be maintained in the project owner's compliance file; and
11. a listing of complaints, notices of violation, official warnings, and citations received during the month, a description of the resolution of the resolve complaints, and the status of any unresolved complaints.

Annual Compliance Report, COM-8

After construction is complete, the project owner shall submit Annual Compliance Reports instead of Monthly Compliance Reports. The reports are for each year of commercial operation and are due to the CPM each year at a date agreed to by the CPM. Annual Compliance Reports shall be submitted over the life of the project unless otherwise specified by the CPM. Each Annual Compliance Report shall identify the reporting period and shall contain the following:

1. an updated compliance matrix showing the status of all conditions of certification (fully satisfied and/or closed conditions do not need to be included in the matrix after they have been reported as closed);
2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
3. documents required by specific conditions to be submitted along with the Annual Compliance Report. Each of these items must be identified in the transmittal letter, and should be submitted as attachments to the Annual Compliance Report;
4. a cumulative listing of all post-certification changes approved by the Energy Commission or cleared by the CPM;
5. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;
6. a listing of filings submitted to, or permits issued by, other governmental agencies during the year;
7. a projection of project compliance activities scheduled during the next year;
8. a listing of the year's additions to the on-site compliance file;
9. an evaluation of the on-site contingency plan for unplanned facility closure, including any suggestions necessary for bringing the plan up to date [see General Conditions for Facility Closure addressed later in this section]; and
10. a listing of complaints, notices of violation, official warnings, and citations received during the year, a description of the resolution of any resolved complaints, and the status of any unresolved complaints.

Construction and Operation Security Plan, COM-9

At least 30 days prior to commencing construction, a site-specific Security Plan for the construction phase shall be developed and maintained at the project site. At least 60 days prior to the initial receipt of hazardous materials on-site, a site-specific Security Plan and Vulnerability Assessment for the operational phase shall be developed and maintained at the project site. The project owner shall notify the CPM in writing that the Plan is available for review and approval at the project site.

Construction Security Plan

The Construction Security Plan must address:

1. site fencing enclosing the construction area;
2. use of security guards;
3. check-in procedure or tag system for construction personnel and visitors;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
5. evacuation procedures.

Operation Security Plan

The Operations Security Plan must address:

1. permanent site fencing and security gate;
2. use of security guards;
3. security alarm for critical structures;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. evacuation procedures;
6. perimeter breach detectors and on-site motion detectors;
7. video or still camera monitoring system;
8. fire alarm monitoring system;
9. site personnel background checks [Site personnel background checks are limited to ascertaining that the employee's claims of identity and employment history are accurate. All site personnel background checks must be consistent with state and federal law regarding security and privacy.]; and
10. site access for vendors and requirements for Hazardous Materials vendors to conduct personnel background security checks.

[Site access for vendors must be strictly controlled. Consistent with recent state and current federal regulations governing the transport of hazardous materials, hazardous materials vendors will have to maintain their transport vehicle fleet and employ only drivers properly licensed and trained. The project owner is required, through the use of contractual language with vendors, to ensure that vendors supplying hazardous materials conduct personnel background checks on any employee involved in the transportation and delivery of hazardous materials to the power plant. All vendor related personnel background checks will be consistent with site personnel background checks, as per above, including state and federal law regarding security and privacy.].

In addition, in order to determine the level of security appropriate for this power plant, the project owner shall prepare a Vulnerability Assessment and implement site security measures addressing hazardous materials storage and transportation consistent with US EPA and US Department of Justice guidelines [Chemical Vulnerability Assessment Methodology (July 2002)]. The level of security to be implemented is a function of the likelihood of an adversary attack, the likelihood of adversary success in causing a catastrophic event, and the severity of consequences of that event. This Vulnerability Assessment will be based, in part, on the use and storage of certain quantities of acutely hazardous materials as described by the California Accidental Release Prevention Program (Cal-ARP, Health and Safety Code section 25531). Thus, the results of the off-site consequence analysis prepared as part of the Risk Management Plan (RMP) will be used to determine the severity of consequences of a catastrophic event and hence the level of security measures to be provided.

The CPM may authorize modifications to these measures, or may require additional measures depending on circumstances unique to the facility, and in response to industry-related security concerns.

Confidential Information, COM-10

Any information that the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information that is determined to be confidential shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

Department of Fish and Game Filing Fee, COM-11

Pursuant to the provisions of Fish and Game Code Section 711.4, the project owner shall pay a filing fee in the amount of \$850. The payment instrument shall be provided to the Energy Commission's Siting Division Project Manager (PM), not the CPM, at the time of project certification and shall be made payable to the California Department of Fish and Game. The PM will submit the payment to the Office of Planning and Research at the time of filing of the notice of decision pursuant to Public Resources Code Section 21080.5.

Reporting of Complaints, Notices, and Citations, COM-12

Prior to the start of construction, the project owner must send a letter to property owners living within one mile of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering with date and time stamp recording. All recorded inquiries shall be responded to within 24 hours. The telephone number shall be posted at the project site and made easily visible to passersby during construction and operation. The telephone number shall be provided to the CPM who will post it on the Energy Commission's web page at:

http://www.energy.ca.gov/sitingcases/power_plants_contacts.html

Any changes to the telephone number shall be submitted immediately to the CPM, who will update the web page.

In addition to the monthly and annual compliance reporting requirements described above, the project owner shall report and provide copies to the CPM of all complaint forms, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt,. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the **NOISE** conditions of certification. All other complaints shall be recorded on the complaint form (Attachment A).

FACILITY CLOSURE

At some point in the future, the project will cease operation and close down. At that time, it will be necessary to ensure that the closure occurs in such a way that public health and safety and the environment are protected from adverse impacts. Although the project setting for this project does not appear, at this time, to present any special or

unusual closure problems, it is impossible to foresee what the situation will be in 30 years or more when the project ceases operation. Therefore, provisions must be made that provide the flexibility to deal with the specific situation and project setting that exist at the time of closure. Laws, Ordinances, Regulations and Standards (LORS) pertaining to facility closure are identified in the sections dealing with each technical area. Facility closure will be consistent with LORS in effect at the time of closure.

There are at least three circumstances in which a facility closure can take place: planned closure, unplanned temporary closure and unplanned permanent closure.

CLOSURE DEFINITIONS

Planned Closure

A planned closure occurs at the end of a project's life, when the facility is closed in an anticipated, orderly manner, at the end of its useful economic or mechanical life, or due to gradual obsolescence.

Unplanned Temporary Closure

An unplanned temporary closure occurs when the facility is closed suddenly and/or unexpectedly, on a short-term basis, due to unforeseen circumstances such as a natural disaster or an emergency.

Unplanned Permanent Closure

An unplanned permanent closure occurs if the project owner closes the facility suddenly and/or unexpectedly, on a permanent basis. This includes unplanned closure where the owner remains accountable for implementing the on-site contingency plan. It can also include unplanned closure where the project owner is unable to implement the contingency plan, and the project is essentially abandoned.

GENERAL CONDITIONS FOR FACILITY CLOSURE

Planned Closure, COM-13

In order to ensure that a planned facility closure does not create adverse impacts, a closure process that provides for careful consideration of available options and applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of closure, will be undertaken. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least 12 months prior to commencement of closure activities (or other period of time agreed to by the CPM). The project owner shall file 120 copies (or other number of copies agreed upon by the CPM) of a proposed facility closure plan with the Energy Commission.

The plan shall:

1. identify and discuss any impacts and mitigation to address significant adverse impacts associated with proposed closure activities and to address facilities, equipment, or other project related remnants that will remain at the site;

2. identify a schedule of activities for closure of the power plant site, transmission line corridor, and all other appurtenant facilities constructed as part of the project;
3. identify any facilities or equipment intended to remain on site after closure, the reason, and any future use; and
4. address conformance of the plan with all applicable laws, ordinances, regulations, standards, and local/regional plans in existence at the time of facility closure, and applicable conditions of certification.

In the event that there are significant issues associated with the proposed facility closure 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 Energy Commission may hold public hearings as part of its approval procedure.

In addition, prior to submittal of the proposed facility closure plan, a meeting shall be held between the project owner and the Energy Commission CPM for the purpose of discussing the specific contents of the plan.

As necessary, prior to or during the closure plan process, the project owner shall take appropriate steps to eliminate any immediate threats to public health and safety and the environment, but shall not commence any other closure activities, until Energy Commission approval of the facility closure plan is obtained.

Unplanned Temporary Closure/On-Site Contingency Plan, COM-14

In order to ensure that public health and safety and the environment are protected in the event of an unplanned temporary facility closure, it is essential to have an on-site contingency plan in place. The on-site contingency plan will help to ensure that all necessary steps to mitigate public health and safety impacts and environmental impacts are taken in a timely manner.

The project owner shall submit an on-site contingency plan for CPM review and approval. The plan shall be submitted no less than 60 days (or other time agreed to by the CPM) prior to commencement of commercial operation. The approved plan must be in place prior to commercial operation of the facility and shall be kept at the site at all times.

The project owner, in consultation with the CPM, will update the on-site contingency plan as necessary. The CPM may require revisions to the on-site contingency plan over the life of the project. In the annual compliance reports submitted to the Energy Commission, the project owner will review the on-site contingency plan, and recommend changes to bring the plan up to date. Any changes to the plan must be approved by the CPM.

The on-site contingency plan shall provide for taking immediate steps to secure the facility from trespassing or encroachment. In addition, for closures of more than 90 days, unless other arrangements are agreed to by the CPM, the plan shall provide for removal of hazardous materials and hazardous wastes, draining of all chemicals from storage tanks and other equipment, and the safe shutdown of all equipment. (Also see specific conditions of certification for the technical areas of **Hazardous Materials Management** and **Waste Management**.)

In addition, consistent with requirements under unplanned permanent closure addressed below, the nature and extent of insurance coverage, and major equipment warranties must also be included in the on-site contingency plan. In addition, the status of the insurance coverage and major equipment warranties must be updated in the annual compliance reports.

In the event of an unplanned temporary closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the circumstances and expected duration of the closure.

If the CPM determines that an unplanned temporary closure is likely to be permanent, or for a duration of more than 12 months, a closure plan consistent with the requirements for a planned closure shall be developed and submitted to the CPM within 90 days of the CPM's determination (or other period of time agreed to by the CPM).

Unplanned Permanent Closure/On-Site Contingency Plan, COM-15

The on-site contingency plan required for unplanned temporary closure shall also cover unplanned permanent facility closure. All of the requirements specified for unplanned temporary closure shall also apply to unplanned permanent closure.

In addition, the on-site contingency plan shall address how the project owner will ensure that all required closure steps will be successfully undertaken in the unlikely event of abandonment.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan. The project owner shall keep the CPM informed of the status of all closure activities.

A closure plan, consistent with the requirements for a planned closure, shall be developed and submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

CBO Delegation and Agency Cooperation

In performing construction and operation monitoring of the project, Commission staff acts as, and has the authority of, the Chief Building Official (CBO). Commission staff may delegate CBO responsibility to either an independent third party contractor or the local building official. Commission staff retains CBO authority when selecting a delegate CBO, including enforcing and interpreting state and local codes, and use of discretion, as necessary, in implementing the various codes and standards.

Commission staff may also seek the cooperation of state, regional and local agencies that have an interest in environmental control when conducting project monitoring.

Enforcement

The Energy Commission's legal authority to enforce the terms and conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy

Commission may amend or revoke the certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or conditions of the Energy Commission Decision. The specific action and amount of any fines the Energy Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, oversight, unforeseeable events, and other factors the Energy Commission may consider.

Moreover, to ensure compliance with the terms and conditions of certification and applicable LORS, delegate agencies are authorized to take any action allowed by law in accordance with their statutory authority, regulations, and administrative procedures.

Noncompliance Complaint Procedures

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1230 et seq., but in many instances the noncompliance can be resolved by using the informal dispute resolution process. Both the informal and formal complaint procedure, as described in current State law and regulations, are described below. They shall be followed unless superseded by current law or regulations.

Informal Dispute Resolution Procedure

The following procedure is designed to informally resolve disputes concerning the interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate this procedure for resolving a dispute. Disputes may pertain to actions or decisions made by any party, including the Energy Commission's delegate agents.

This procedure may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1230 et seq., but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and conditions of certification as approved by the Energy Commission, although the agreed upon resolution may result in a project owner, or in some cases the Energy Commission staff, proposing an amendment.

The procedure encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be referred to the full Energy Commission for consideration via the complaint and investigation process. The procedure for informal dispute resolution is as follows:

Request for Informal Investigation

Any individual, group, or agency may request the Energy Commission to conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and conditions of certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter and within seven working days of the CPM's request, provide a written report of the results of the investigation, including corrective measures proposed or undertaken, to the CPM. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to provide an initial report, within 48 hours, followed by a written report filed within seven days.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within 14 days of the project owner's filing of its written report. Upon receipt of such a request, the CPM shall:

1. immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place;
2. secure the attendance of appropriate Energy Commission staff and staff of any other agencies with expertise in the subject area of concern, as necessary;
3. conduct such meeting in an informal and objective manner so as to encourage the voluntary settlement of the dispute in a fair and equitable manner; and
4. after the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum that fairly and accurately identifies the positions of all parties and any conclusions reached. If an agreement has not been reached, the CPM shall inform the complainant of the formal complaint process and requirements provided under Title 20, California Code of Regulations, section 1230 et seq.

Formal Dispute Resolution Procedure-Complaints and Investigations

If either the project owner, Energy Commission staff, or the party requesting an investigation is not satisfied with the results of the informal dispute resolution process, such party may file a complaint or a request for an investigation with the Energy Commission's General Counsel. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1230 et seq.

The Commission Chair, upon receipt of a written request stating the basis of the dispute, may grant a hearing on the matter, consistent with the requirements of noticing provisions. The Energy Commission shall have the authority to consider all relevant facts involved and make any appropriate orders consistent with its jurisdiction (Cal. Code Regs., tit. 20, §§ 1232-1236).

Post Certification Changes to the Energy Commission Decision: Amendments, Insignificant Project Changes and Verification Changes, COM-16

The project owner must petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to 1) delete or change a condition of certification; 2) modify the project design or operational requirements; and 3) transfer ownership or operational control of the facility.

A petition is required for amendments and for insignificant project changes. For verification changes, a letter from the project owner is sufficient. In all cases, the petition or letter requesting a change should be submitted to the Energy Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209.

The criteria that determine which type of change process applies are explained below.

Amendment

A proposed change will be processed as an amendment if it involves a change to the requirement or protocol, or in some cases the verification portion of a condition of certification, an ownership or operator change, or a potential significant environmental impact.

Insignificant Project Change

The proposed change will be processed as an insignificant project change if it does not require changing the language in a condition of certification, have a potential for significant environmental impact, nor cause the project to violate laws, ordinances, regulations or standards.

Verification Change

As provided in Title 20, Section 1770 (d), California Code of Regulations, a verification may be modified by staff without requesting an amendment to the decision if the change does not conflict with the conditions of certification.