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Conditions of Certification Compendium Stanton Energy Reliability Center

AIR QUALITY

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

<u>Verification</u>: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates. The AQCMM and all delegates must be approved by the CPM before the start of ground disturbance.

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

<u>Verification</u>: At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM and the South Coast Air Quality Management District (District). The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

AQ-SC3 <u>Construction Fugitive Dust Control:</u> The AQCMM shall submit documentation to the CPM in each Monthly Compliance Report (MCR) that demonstrates compliance with the following mitigation measures for the purposes of minimizing fugitive dust emissions created from construction activities and preventing all fugitive dust plumes from leaving the project site and linear facility routes. Any deviation from the following mitigation measures shall require prior CPM notification and approval.

- A. All unpaved roads and disturbed areas in the project and linear construction sites shall be watered as frequently as necessary to comply with the dust mitigation objectives of Condition of Certification AQ-SC4. The frequency of watering can be reduced or eliminated during periods of precipitation.
- B. No vehicle shall exceed 10 miles per hour on unpaved areas within the construction site.
- C. Visible speed limit signs shall be posted at the construction site entrances.
- D. All construction equipment 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 exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
- G. All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM.
- H. Construction areas adjacent to any paved roadway shall be provided with sandbags or other similar measures as specified in the Storm Water Pollution Prevention Plan (SWPPP) to prevent run-off to roadways.
- I. All paved roads within the construction site shall be swept at a frequency determined by the AQCMM on days when construction activity results in tracking to prevent the accumulation of dirt and debris to minimize dust plumes.
- J. At least the first 500 feet of any paved public roadway exiting the construction site, laydown areas, or construction staging areas, shall be swept at a frequency determined by the AQCMM on days when construction activity results in tracking to prevent the accumulation of dirt and debris to minimize dust plumes or on any other day when dirt or runoff resulting from the construction site activities is visible on the public roadways.

- K. All soil storage piles and disturbed areas that remain inactive for longer than ten days shall be covered, or shall be treated with appropriate dust suppressant compounds.
- L. All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be covered, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least two feet of freeboard, so that no visible emissions occur.
- M. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.
- N. Disturbed areas shall be re-vegetated as soon as practical.

Verification: The AQCMM shall provide the CPM a Monthly Compliance Report (MCR) that includes:

- 1. A summary of all actions taken to maintain compliance with this condition (including sweeping log entries);
- 2. Copies of any complaints filed with the District in relation to project construction; and
- 3. Any other documentation deemed necessary by the CPM, District, or AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.
- AQ-SC4 Dust Plume Response Requirement: The AQCMM or delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes that have the potential to be transported: (1) off the project site, (2) 200 feet beyond the centerline of the construction of linear facilities, or (3) within 100 feet upwind of any regularly occupied structures not owned by the project owner, indicate that existing mitigation measures are not resulting in effective mitigation. The AQCMM or delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed and shall include a section in the AQCMP detailing

how the additional mitigation measures will be accomplished within the time limits specified:

- Step 1: The AQCMM or delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.
- Step 2: The AQCMM or delegate shall direct implementation of additional methods of dust suppression if step 1 specified above fails to result in adequate mitigation within 30 minutes of the original determination.
- Step 3: The AQCMM or delegate shall direct a temporary shutdown of the activity causing the emissions if step 2, specified above, fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQCMM or delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The owner/operator may appeal to the CPM any directive from the AQCMM or delegate to shut down an activity, provided that the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM before that time.

Verification: The AQCMM shall provide to the CPM in the MCR that includes:

- 1. A summary of all actions taken to maintain compliance with this condition;
- 2. Copies of any complaints filed with the District in relation to project construction; and
- 3. Any other documentation deemed necessary by the CPM or AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.
- AQ-SC5 <u>Diesel-Fueled Engine Control</u>: The AQCMM shall submit to the CPM, in the MCR, a construction mitigation report that demonstrates compliance with the following mitigation measures for purposes of controlling diesel construction-related emissions. Any deviation from the following mitigation measures shall require prior CPM notification and approval.
 - A. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the conditions set forth herein.

- B. All construction diesel engines with a rating of 50 hp or higher shall meet, at a minimum, the Tier 4 or 4i California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. This good faith effort shall be documented with signed written correspondence by the appropriate construction contractors along with documented correspondence with at least two construction equipment rental firms. In the event that a Tier 4 or 4i engine is not available for any off-road equipment larger than 50 hp, that equipment shall be equipped with a Tier 3 engine, or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 3 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" for the following, as well as other, reasons.
 - There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 3 equivalent emission levels and the highest level of available control using retrofit or Tier 2 engines is being used for the engine in question; or
 - 2. The construction equipment is intended to be on site for 10 working days or less.

The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not practical.

- C. The use of a retrofit control device may be terminated immediately if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, provided that: 1) the CPM is informed within 10 working days of the termination, 2) a replacement for the equipment item in question meeting the controls required in item "B" occurs within 10 days of termination of the use, and 3) one of the following conditions exists:
 - 1. The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time

for maintenance, and/or reduced power output due to an excessive increase in back pressure.

- 2. The retrofit control device is causing or is reasonably expected to cause engine damage.
- 3. The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.
- 4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
- D. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (B) above shall be properly maintained and the engines tuned to the engine manufacturers' specifications.
- E. All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement.
- F. Construction equipment shall employ electric motors when feasible.

<u>Verification:</u> The AQCMM shall include in a table in the MCR the following to demonstrate control of diesel construction-related emissions:

- 1. A summary of all actions taken to maintain compliance with this condition,
- 2. A list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained, and
- 3. Any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.
- **AQ-SC6** The project owner shall provide the CPM copies of any District-issued project air permit for the facility. The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or U.S. EPA, and any revised permit issued by the District or U.S. EPA, for the project.

<u>Verification:</u> The project owner shall submit any project air permit and 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-SC7 The project owner shall submit to the CPM Quarterly Operation Reports, following the end of each calendar quarter that include operational and emissions information as necessary to demonstrate compliance with the Conditions of Certification herein. The Quarterly Operation Report shall specifically state that the facility meets all applicable conditions of certification or note or highlight all incidences of noncompliance.

Verification: The project owner shall submit the Quarterly Operation Reports to the CPM and District, if requested by the District, no later than 30 days following the end of each calendar quarter.

DISTRICT'S PERMITTED EQUIPMENT AND CONDITIONS

Equipment

ID No.	Equipment Descriptions
PROCES	S 1: INTERNAL COMBUSTION – POWER GENERATION
D1	GAS TURBINE, NO. 1, SIMPLE-CYCLE, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000 PC SPRINT, 484.2 MMBTU/HR (HHV) AT 40 DEG F, WITH WATER INJECTION
	WITH
B2	GENERATOR, 51.049 MW GROSS AT 40 DEG F
B16	BATTERY ENERGY STORAGE SYSTEM, 10 MW
C3	CO OXIDATION CATALYST, NO. 1, BASF, MODEL CAMET, 68.2 CU. FT.; WIDTH: 23 FT
	4.8 IN; HEIGHT: 25 FT; LENGTH: 2.1 IN
C4	SELECTIVE CATALYTIC REDUCTION, NO. 1, CORMETECH, MODEL CUSTOM,
	TITANIA-BASED CERAMIC, 1385 CU. FT.; WIDTH: 23 FT 4.8 IN; HEIGHT: 25 FT;
	LENGTH: 2 FT 8 IN WITH
B5	AMMONIA INJECTION, AQUEOUS AMMONIA
S6	STACK, TURBINE NO. 1, HEIGHT: 71 FT; DIAMETER: 12 FT
D7	GAS TURBINE, NO. 2, SIMPLE-CYCLE, NATURAL GAS, GENERAL ELECTRIC, MODEL
	LM6000 PC SPRINT, 484.2 MMBTU/HR (HHV) AT 40 DEG F, WITH WATER INJECTION
	WITH
B8	GENERATOR, 51.049 MW GROSS AT 40 DEG F
B17	BATTERY ENERGY STORAGE SYSTEM, 10 MW
C9	CO OXIDATION CATALYST, NO. 2, BASF, MODEL CAMET, 68.2 CU. FT.; WIDTH: 23 FT
	4.8 IN; HEIGHT: 25 FT; LENGTH: 2.1 IN
C10	SELECTIVE CATALYTIC REDUCTION, NO. 2, CORMETECH, MODEL CUSTOM,
	TITANIA-BASED CERAMIC, 1385 CU. FT.; WIDTH: 23 FT 4.8 IN; HEIGHT: 25 FT;
	LENGTH: 2 FT 8 IN WITH
B11	AMMONIA INJECTION, AQUEOUS AMMONIA
S12	STACK, TURBINE NO. 2, HEIGHT: 71 FT; DIAMETER: 12 FT

D13	STORAGE TANK, AQUEOUS AMMONIA 19 PERCENT, 5000 GALS; DIAMETER: 10 FT; HEIGHT: 8 FT 6 IN.
E14	RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATING
E15	RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS

The following conditions were developed by the SCAQMD and are obtained from the FDOC.

Facility Conditions

- AQ-F1 Except for open abrasive blasting operations, the project owner shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
 - (a) As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
 - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, California Air Resources Board (ARB), the United States Environmental Protection Agency (U.S. EPA) and the California Energy Commission (Energy Commission).

Device Conditions

AQ-A1 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
NOx	Less than or equal to 3601 LBS IN ANY
	CALENDAR MONTH
CO	Less than or equal to 3690 LBS IN ANY CALENDAR MONTH
VOC	Less than or equal to 1156 LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to 2237 LBS IN ANY CALENDAR MONTH
PM2.5	Less than or equal to 2237 LBS IN ANY CALENDAR MONTH
SOx	Less than or equal to 758 LBS IN ANY CALENDAR MONTH

For the purposes of this condition, the above monthly emission limits shall be based on the emissions from a single turbine.

The turbine shall not commence with normal operation until the commissioning process has been completed. Normal operation commences when the turbine is able to supply electrical energy to the power grid as required under contract with the relevant entities. The SCAQMD shall be notified in writing once the commissioning process for each turbine is completed.

Normal operation may commence in the same calendar month as the completion of the commissioning process provided the turbine is in compliance with the above emission limits.

For a month during which both commissioning and normal operation take place, the monthly emissions shall be the sum of the commissioning emissions and the normal operation emissions.

For the commissioning period, CO, VOC, PM10/PM2.5, and SOx emissions shall be calculated using the following emission factors:

Pre-Catalyst Phase: CO, 155.08 lb/mmcf; VOC, 24.60 lb/mmcf; PM10/PM2.5, 32.09 lb/mmcf; and SOx, 2.14 lb/mmcf. The pre-catalyst phase starts with step 1 of the commissioning activities (first fire and full speed, no load, not synchronized, no generator excitation) and ends with step 3 (first synchronization). The steps referenced herein are described in the commissioning emissions (per turbine) table provided by Stanton Energy Reliability Center.

Post-Catalyst Phase: CO, 6.70 lb/mmcf; VOC, 3.42 lb/mmcf; PM10/PM2.5, 8.29 lb/mmcf; and SOx, 2.14 lb/mmcf. The post-catalyst phase starts with step 4 of the commissioning activities (synchronization and ramp to full load, tuning water, ammonia (rough), and AVR (as needed), gas compressor turning) and ends with step 6 (full load operation with water injection and SPRINT in service and SCR/ammonia tuning).

For the commissioning period (pre-catalyst and post-catalyst phases), NOx emissions shall be measured with an SCAQMD Method 100.1 source test van CEMS.

For normal operation, VOC, PM10/PM2.5, and SOx emissions shall be calculated using the following emission factors: VOC, 3.26 lb/mmcf; PM10/PM2.5, 6.32 lb/mmcf; and SOx, 2.14 lb/mmcf (based on 0.75 grains S/100 scf).

For normal operation, the NOx and CO emission shall be measured with certified NOx CEMS and CO CEMS, respectively. For the interim period after commissioning but prior to CEMS certification, and in the event of CEMS failure subsequent to CEMS certification, the emission factors shall be as follows: NOx, 10.17 lb/mmcf; CO, 10.42 lb/mmcf.

The project owner shall maintain records to demonstrate compliance with this condition and shall make such records available to the Executive Officer upon request. The records shall be maintained for a minimum of 5 years in a manner approved by SCAQMD. The records shall include, but not be limited to, natural gas usage in a calendar month and automated monthly and annual calculated emissions. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall provide emissions summary data in compliance with his condition as part of the Quarterly Operation reports (**AQ-SC7**).

CONTAMINANT	EMISSIONS LIMIT
NOx	Less than or equal to 7,848 LBS IN ANY ONE YEAR
CO	Less than or equal to 9,143 LBS IN ANY ONE YEAR
VOC	Less than or equal to 3,432 LBS IN ANY ONE YEAR
PM10	Less than or equal to 5,412 LBS IN ANY ONE YEAR
PM2.5	Less than or equal to 5,412 LBS IN ANY ONE YEAR
SOx	Less than or equal to 595 LBS IN ANY ONE YEAR

AQ-A2 The project owner shall limit emissions from this equipment as follows:

For the purposes of this condition, the above annual emission limits shall be based on the total combined emissions from both turbines (D1 and D7).

The annual emissions of the facility for purposes of demonstrating compliance with this condition shall be calculated from the monthly emissions, including emissions for the commissioning period, as required by condition A63.1 (**AQ-A1**), except the normal operation annual emission factor for SOx is 0.72 lb/mmcf (based on 0.25 grains S/100 scf (annual average)).

The project owner shall maintain records to demonstrate compliance with this condition and shall make such records available to the SCAQMD Executive Officer upon request. The records shall be maintained for a minimum of 5 years in a manner approved by SCAQMD. The records shall include, but not be limited to, natural gas usage in a calendar month and automated monthly and annual calculated emissions. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification</u>: The project owner shall provide emissions summary data in compliance with his condition as part of the 4th Quarterly Operation reports (**AQ-SC7**).

AQ-A3 The 2.5 PPMV NOx emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen.

This limit shall not apply to turbine commissioning, startup, and shutdown periods. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-A4 The 4.0 PPMV CO emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen.

This limit shall not apply to turbine commissioning, startup, and shutdown periods. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-A5 The 2.0 PPMV VOC emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen.

This limit shall not apply to turbine commissioning, startup, and shutdown periods. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-A6 The 25 PPMV NOx emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen.

This limit shall not apply to turbine commissioning, startup, and shutdown periods. [40 CFR 60 Subpart KKKK, 7-6-2006] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-A7 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time. [RULE 475, 10-8-1976; RULE 475, 8-7-1978] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-A8 The 5.0 PPMV NH₃ emission limit is averaged over 1 hour, dry basis at 15 percent oxygen.

This limit shall not apply to turbine commissioning, startup, and shutdown periods.

The project owner shall calculate and continuously record the NH₃ slip concentration using the following equation:

 NH_3 (ppmvd) = [a-b*c/1,000,000]*1,000,000/b, where:

a = NH₃ injection rate (lb/hr)/17(lb/lb-mol)

b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol)

c = change in measured NOx across the SCR (ppmvd at 15% O2)

The project owner shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to within plus or minus 5 percent calibrated at least once every 12 months. The project owner shall use the method described above or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedure shall be in effect no later than 90 days after initial startup of the turbine.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia.

The District may require the installation of a CEMS designed to monitor ammonia concentrations if the District determines that a commercially available CEMS has been proven to be accurate and reliable and that an adequate Quality Assurance/Quality Control protocol for the CEMS has been established. The District or another agency must establish a District approved Quality Assurance/Quality Control protocol prior to the ammonia CEMS being a requirement.

The above ammonia slip calculation and the annual testing under D29.3 (**AQ-D3**) shall not be required if a District approved ammonia CEMS is installed. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: C4, C10]

<u>Verification:</u> The project owner shall install, calibrate, maintain, and the monitoring system according to a District-approved monitoring plan. Prior to the installation the project owner shall submit a monitoring plan to the CPM for review and approval. The project owner shall include exceedances of the hourly ammonia slip limit and calibration reports as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-B1 The project owner shall not use natural gas containing the following specified compounds:

COMPOUND	RANGE	GRAIN PER 100 SCF
H ₂ S	Greater than	0.25

This concentration limit is an annual average based on monthly samples of natural gas composition or gas supplier documentation. Gaseous fuel samples shall be tested using District Method 307-91 for total sulfur calculated as H₂S. [RULE 1303(a)(1)-BACT; 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall include documentation demonstrating compliance as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-C1 The project owner shall limit the number of start-ups to no more than 124 in any one calendar month.

For the purposes of this condition, the limits are for one turbine, except the annual limit is the combined total for two turbines (D1 and D7). The number of startups shall not exceed 4 startups in any one day. The number of startups shall not exceed 1000 in any calendar year.

A startup shall not exceed 15 minutes. The NOx emissions from a startup shall not exceed 3.6 lbs. The CO emissions from a startup shall not exceed 5.3 lbs.

The beginning of startup occurs at initial fire in the combustor and the end of startup occurs when the BACT levels are achieved. If during startup the process is aborted the process will count as one startup.

The project owner shall maintain records to demonstrate compliance with this condition and shall make such records available to the Executive Officer upon request. The records shall be maintained for a minimum of 5 years in a manner approved by SCAQMD. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall provide records including a table documenting the type of startup, duration and date of occurrence.

AQ-C2 The project owner shall limit the number of shutdowns to no more than 124 in any one calendar month.

For the purposes of this condition, the limits are for one turbine, except the annual limit is the combined total for two turbines (D1 and D7). The number of shutdowns shall not exceed 4 shutdowns in any one day. The number of shutdowns shall not exceed 1000 in any calendar year.

Each shutdown shall not exceed 10 minutes. The NOx emissions from a shutdown event shall not exceed 0.55 lbs. The CO emissions from a shutdown event shall not exceed 0.24 lbs.

The project owner shall maintain records in a manner approved by the District to demonstrate compliance with this condition and the records shall be made available to District personnel upon request. The records shall be maintained for a minimum of 5 years in a manner approved by SCAQMD. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall provide records including a table documenting each shutdown, and indicating the duration and date of occurrence.

AQ-C3 The project owner shall install and maintain a pressure relief valve set at 2.3 psig. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D13]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**).

AQ-D1	The project owner shall conduct source test(s) for the pollutant(s) identified
	below.

POLLUTANT(S) TO BE TESTED	REQUIRED TEST METHOD(S)	AVERAGING TIME	TEST LOCATION
NOx emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment
CO emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment
SOx emissions	AQMD Laboratory Method 307-91	District Approved Averaging Time	Fuel Sample
VOC emissions	District Method 25.3 Modified	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	EPA Method 201A / District Method 5.1	District-Approved Averaging Time	Outlet of the SCR serving this equipment
PM2.5 emissions	EPA Method 201A and 202	District-Approved Averaging Time	Outlet of the SCR serving this equipment
NH ₃ emissions	District Method 207.1	1 hour	Outlet of the SCR serving this equipment

Note: SCAQMD Source Testing Dept. indicates District Method 207.1 is the current standard ammonia source test method.

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in MW-gross and MW-net.

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 90 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The sampling time for PM and PM2.5 tests shall be 4 hours or longer as necessary to obtain a measureable amount of sample.

The tests shall be conducted when the turbine is operating at loads of 50, 75, and 100 percent of maximum load.

For natural gas fired turbines only, for the purpose of demonstrating compliance with VOC BACT limits as determined by SCAQMD, the project owner shall use SCAQMD Method 25.3 modified as follows:

- a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,
- b) Pressurization of the Summa canisters with zero gas analyzed/certified to less than 0.05 ppmv total hydrocarbons as carbon, and
- c) Analysis of Summa canisters per the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmv or less and reported to two significant figures. The temperature of the Summa canisters when extracting the samples for analysis shall not be below 70 F.

The use of this modified method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon for natural gas fired turbines.

For purposes of this condition, an alternative test method may be allowed for any of the above pollutants upon concurrence by EPA, CARB, and SCAQMD.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limit. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

<u>Verification:</u> The project owner shall submit the proposed protocol for the initial source tests no later than 90 days prior to the proposed source test date to both the

District and CPM for approval. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test of the date and time of the scheduled test.

AQ-D2 The project owner shall conduct source test(s) for the pollutant(s) identified below.

POLLUTANT(S) TO BE TESTED	REQUIRED TEST METHOD(S)	AVERAGING TIME	TEST LOCATION
SOx emissions	AQMD Laboratory Method 307-91	District Approved Averaging Time	Fuel Sample
VOC emissions	District Method 25.3 Modified	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	EPA Method 201A / District Method 5.1	District-Approved Averaging Time	Outlet of the SCR serving this equipment

The test(s) shall be conducted at least once every three years.

The test shall be conducted in accordance with a District approved source test protocol. The test shall be conducted and the results submitted to the District within 60 days after the test date. The SCAQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The sampling time for the PM10 test(s) shall be 4 hours or longer as necessary to obtain a measureable amount of sample.

The test shall be conducted when the turbine is operating at 100 percent of maximum load.

For natural gas fired turbines only, for the purpose of demonstrating compliance with VOC BACT limits, as determined by SCAQMD, the project owner shall use Method 25.3 modified as follows:

- a) Triplicate stack gas samples extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute,
- b) Pressurization of the Summa canisters with zero gas analyzed/certified to less than 0.05 ppmv total hydrocarbons as carbon, and
- c) Analysis of Summa canisters per the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmv or less and reported to two significant figures. The temperature of the Summa canisters when extracting the samples for analysis shall not be below 70 F.

The use of this modified method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval, except for the determination of compliance with the BACT level of 2.0 ppmv VOC calculated as carbon for natural gas fired turbines.

For purposes of this condition, an alternative test method may be allowed for any of the above pollutants upon concurrence by EPA, CARB, and SCAQMD.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emissions limit. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

Verification: The project owner shall test according to the original protocol. If changes to the testing methods or testing conditions are proposed then the project owner shall submit a revised protocol for the source tests no later than 45 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall submit the source test results no later than 60 days following the source test date to both the District owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test of the date and time of the scheduled test.

AQ-D3	The project owner shall conduct source test(s) for the pollutant(s) identified
	below.

POLLUTANT(S) TO	REQUIRED TEST	AVERAGING	TEST LOCATION
BE TESTED	METHOD(S)	TIME	
NH ₃ emissions	District Method 207.1	1 hour	Outlet of the SCR serving this equipment

Note: SCAQMD Source Testing Dept. indicates District Method 207.1 is the current standard ammonia source test method.

The test shall be conducted in accordance with a District approved source test protocol. The test shall be conducted and the results submitted to the District within 60 days after the test date. The SCAQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test

shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit.[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall test according to the original protocol. If changes to the testing methods or testing conditions are proposed then the project owner shall submit a revised protocol for the source tests no later than 45 days prior to the proposed source test date to both the District and CPM for approval. The project owner shall submit the source test results no later than 60 days following the source test date to both the District owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test of the date and time of the scheduled test.

AQ-D4 The project owner shall install and maintain a CEMS to measure the following parameters:

CO concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis for the purpose of demonstrating compliance with the BACT limit of 4.0 ppmvd CO at 15% O2.

The CEMS shall be installed and operated to measure CO concentrations over a 15 minute averaging time period.

The CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine, and in accordance with an approved SCAQMD Rule 218 CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

The initial certification testing shall be completed and submitted to the SCAQMD within 90 days of the conclusion of the turbine commissioning period. For the interim period after commissioning but prior to CEMS certification, and in the event of CEMS failure subsequent to CEMS certification, the project owner shall use the emission factor for CO provided in condition A63.1 for these purposes.

The CEMS will convert the actual CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

CO Emission Rate, lbs/hr = K*Cco*Fd[20.9/(20.9% - %O₂ d)][(Qg * HHV)/10E+06], where:

- 1. K = 7.267 *10E-08 (lb/scf)/ppm
- Cco = Average of four consecutive 15 min. average CO concentrations, ppm
- 3. Fd = 8710 dscf/MMBTU natural gas
- 4. $%O_2 d =$ Hourly average % by volume $O_2 dry$, corresponding to Cco
- 5. Qg = Fuel gas usage during the hour, scf/hr
- 6. HHV = Gross high heating value of fuel gas, BTU/scf

[RULE 218, 5-14-1999; RULE 218.1, 5-14-1999; RULE 218.1, 5-14-2012; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit the SCAQMD approved CEMS plan to the CPM within 90 days of SCAQMD approval. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-D5 The project owner shall install and maintain a CEMS to measure the following parameters:

NOx concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis for the purpose of demonstrating compliance with the BACT limit of 2.5 ppmvd NOx at 15% O2.

The CEMS shall be installed and operated to measure NOx concentrations over a 15 minute averaging time period.

The CEMS will convert the actual NOx concentrations to mass emission rates (lb/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine, and in accordance with an approved CEMS certification application submitted in compliance with 40 CFR Part 60 Subpart

KKKK and 40 CFR Part 75. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

The initial certification testing shall be completed and submitted to the SCAQMD within 90 days of the conclusion of the turbine commissioning period. During the interim period between the conclusion of the commissioning period and the provisional certification date of the CEMS, and in the event of CEMS failure subsequent to CEMS certification, the project owner shall use the emission factor for NOx provided in condition A63.1 (AQ-A1) for these purposes.

The NOx CEMS shall comply with the requirements of conditions D82.2 (**AQ-D5**), H23.1 (**AQ-H1**), and H23.2 (**AQ-H2**). [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; 40 CFR 60 Subpart KKKK, 7-6-2006; 40 CFR 75-Acid Rain CEM, 1-18-2012] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit the SCAQMD approved CEMS plan to the CPM within 90 days of SCAQMD approval. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-D6 The project owner shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia (NH₃).

The project owner shall also install and maintain a device to continuously record the parameter being measured. Continuously record shall be defined as measuring at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

The flow meter shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The project owner shall maintain the ammonia injection rate between 15 and 200 pounds per hour, except during startups and shutdowns. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: C4, C10]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall make the

site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-D7 The project owner shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The project owner shall also install and maintain a device to continuously record the parameter being measured. Continuously record shall be defined as measuring at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

The temperature gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The exhaust temperature at the inlet of the SCR/CO catalyst shall be maintained between 460 degrees F and 855 degrees F, except during startups and shutdowns. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: C4, C10]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-D8 The project owner shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches water column.

The project owner shall also install and maintain a device to continuously record the parameter being measured. Continuously record shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

The pressure gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure differential shall not exceed 6.0 inches water column. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: C4, C10]

<u>Verification:</u> The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC7**). The project owner shall make the

site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-E1 The project owner shall upon completion of construction, operate and maintain this equipment according to the following requirements:

In accordance with all air quality mitigation measures stipulated in the final California Energy Commission decision for the 16-AFC-01 project. [CA PRC CEQA, 5-12-2017] [Devices subject to this condition: D1, C3, C4, D7, C9, C10, D13]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-E2 The project owner shall install this equipment according to the following requirements:

The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the project owner has notified the SCAQMD Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [RULE 202, 5-7-1976; RULE 202, 12-3-2004; RULE 205, 1-5-1990] [Devices subject to this condition: D1, C3, C4, D7, C9, C10, D13]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-E3 The project owner shall operate and maintain this equipment according to the following requirements:

Total commissioning hours shall not exceed 100 hours of fired operation for each turbine from the date of initial turbine start-up. Of the 100 hours, commissioning hours without control (pre-catalyst phase as defined in condition A63.1 (**AQ-A1**)) shall not exceed 20 hours.

Two turbines may be commissioned at the same time.

The project owner shall vent this equipment to the CO oxidation catalyst and SCR control system whenever the turbine is in operation after commissioning is completed.

The project owner shall provide the SCAQMD with written notification of the initial startup date of each turbine.

The project owner shall maintain records in a manner approved by the District to demonstrate compliance with this condition and the records shall be made available to the District personnel upon request. The records shall include, but not be limited to, the total number of commissioning hours, number of commissioning hours without control, natural gas fuel usage for the precatalyst phase, and natural gas fuel usage for the post-catalyst phase (precatalyst and post-catalyst phases as defined in condition A63.1 (**AQ-A1**)). [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit all records including the total number of commissioning hours, number of commissioning hours without control, natural gas fuel usage for the pre-catalyst phase, and natural gas fuel usage for the post-catalyst phase per turbine to demonstrate compliance with this condition as part of the Quarterly Operational Report required in **AQ-SC7**. The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-E4 The project owner shall upon completion of the construction, operate and maintain this equipment according to the following requirements:

The 120 lbs/MMBtu CO₂ emission limit for non-base load turbines shall apply.

Compliance with the 120 lbs/MMBtu CO₂ emission limit shall be determined on a 12-operating-month rolling average basis.

This turbine shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart TTTT, including applicable requirements for recordkeeping and reporting. [40 CFR 60 Subpart TTTT, 10-23-2015] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit to the CPM for approval all emissions and emission calculations to demonstrate compliance with this condition as part of the 4th quarter Quarterly Operational Report required in **AQ-SC7**.

AQ-E5 The project owner shall vent this equipment, during filling, only to the vessel from which it is being filled. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002] [Devices subject to this condition: D13]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-H1 This equipment is subject to the applicable requirements of the following

Rules or Regulations:

CONTAMINANT	RULE	RULE/SUBPART
NOx	40 CFR 60, SUBPART	КККК
SO2	40 CFR 60, SUBPART	КККК

The NOx CEMS shall comply with the requirements of conditions D82.2 (**AQ-D5**), H23.1 (**AQ-H1**), and H23.2 (**AQ-H2**).

The NOx CEMS shall comply with the applicable requirements of §60.13, §60.4335(b), §60.4340(b)(1) and §60.4345 for monitoring.

The NOx CEMS shall comply with the applicable requirements of §60.4350 for identifying excess emissions.

The project owner shall comply with the requirements of §60.7(c), §60.4375, §60.4380, and §60.4395 for reporting excess emissions and monitor downtime.

The performance evaluation of the NOx CEMS shall be conducted as part of the initial performance test of the turbine required no later than 180 days after initial start-up by §60.8, in accordance with the requirements of §60.4405. The initial performance test of the turbine shall be conducted to demonstrate compliance with the §60.4320 limit of 25.0 ppmv NOx at 15% O2, 1-hour averaging. [40 CFR 60 Subpart A, 6-3-2016; 40 CFR 60 Subpart KKKK, 7-6-2006] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-H2 This equipment is subject to the applicable requirements of the following Rules or Regulations:

CONTAMINANT	RULE	RULE/SUBPART
NOx	40 CFR	Part 75
SO ₂	40 CFR	Part 75

The NOx CEMS shall comply with the requirements of conditions D82.2 (**AQ-D5**), H23.1 (**AQ-H1**), and H23.2 (**AQ-H2**).

The project owner shall comply with the applicable requirements of §75.4 for monitoring systems installation and certification testing compliance dates.

The NOx CEMS shall comply with the applicable requirements of §75.10 for general operating requirements.

The NOx CEMS shall comply with the applicable requirements of §75.12 for specific provisions for monitoring NOx emission rate.

The project owner shall comply with §75.20 for the initial certification requirements for the NOx CEMS.

The project owner shall comply with §75.21 for the quality assurance and quality control requirements for the NOx CEMS.

The project owner shall use the reference test methods in §75.22, or equivalent method(s) approved by the EPA.

The project owner shall comply with §75.24 for out-of-control periods and adjustment for system bias requirements for the NOx CEMS.

The project owner shall comply with the applicable requirements of Subpart D--Missing Data Substitution Procedures.

The project owner shall comply with the applicable requirements of Subpart F — Recordkeeping Requirements.

The project owner shall comply with the applicable requirements of Subpart G — Reporting Requirements.

The project owner shall measure and record SO₂ emissions by using the applicable procedures specified in appendix D to Part 75 for estimating hourly SO₂ mass emissions, pursuant to §75.11(d)(2).

The project owner shall measure and record CO_2 emissions by following the procedures in appendix G to Part 75 for estimating daily CO_2 mass emissions, pursuant to 575.10(a)(3)(ii) and 575.13(b). [40 CFR 75-Acid Rain CEM, 1-18-2012] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-H3 This equipment is subject to the applicable requirements of the following Rules or Regulations:

CONTAMINANT	RULE	RULE/SUBPART
Refrigerants	District Rule	1415

[Rule 1415, 12-3-2010] [Devices subject to this condition: E15]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-H4 This equipment is subject to the applicable requirements of the following Rules or Regulations:

CONTAMINANT	RULE	RULE/SUBPART
Refrigerants	40 CFR 82, Subpart	F

[40 CFR 82 Subpart F, 6-25-2013] [Devices subject to this condition: E15]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

AQ-K1 The project owner shall provide to the District a source test report in accordance with the following requirements:

Source test results shall be submitted to the District no later than 90 days after the source tests required by conditions D29.1 (**AQ-D1**), D29.2 (**AQ-D2**), and D29.3 (**AQ-D3**), are conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), lbs/MM cubic feet, and lbs/MMBtu. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rates shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, the fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted. [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-

10-1996; RULE 1303(b)(2)-Offset, 12-6-2002] [Devices subject to this condition: D1, D7]

<u>Verification:</u> The project owner shall submit the source test results no later than 90 days following the source test date to both the District and CPM.

AQ-K2 The project owner shall keep records, in a manner approved by the district, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings. [RULE 3004(a)(4) - Periodic Monitoring, 12-12-1997] [Devices subject to this condition: E14]

<u>Verification:</u> The project owner shall make the site available for inspection by representatives of the District, ARB, U.S. EPA and the Energy Commission.

BIOLOGICAL RESOURCES

DESIGNATED BIOLOGIST SELECTION

BIO-1 The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the Energy Commission compliance project manager (CPM) for approval.

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.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

<u>Verification:</u> The project owner shall submit the specified information at least 75 days prior to the start of pre-construction site mobilization activities. No pre-construction site mobilization or construction-related activities shall commence until a CPM-approved Designated Biologist is available to be on site.

If a Designated Biologist is replaced, the specified information for the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

DESIGNATED BIOLOGIST DUTIES

BIO-2 The project owner shall ensure that the Designated Biologist performs the following during any site (or related facilities) mobilization, ground disturbance,

grading, construction, operation, closure, or restoration activities. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the contact for the project owner and CPM. The Designated Biologist duties shall include the following:

- 1. Advise the project owner's Construction and Operation Managers on the implementation of the biological resources conditions of certification;
- 2. Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the project owner;
- 3. Be available to supervise, conduct and coordinate mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as special status species or their habitat;
- Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
- 5. Inspect active construction areas where animals may have become trapped prior to construction commencing each day. Inspect, or train and direct the site personnel how to inspect, the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way;
- 6. Notify the project owner and the CPM of any non-compliance with any biological resources condition of certification;
- 7. Respond directly to inquiries of the CPM regarding biological resource issues;
- Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the Monthly Compliance Reports (MCRs) and the Annual Compliance Report (ACR);
- 9. Train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and all permits; and

10. Maintain the ability to be in regular, direct communication with representatives of California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and CPM, including notifying these agencies of dead or injured listed species and reporting special status species observations to the California Natural Diversity Database.

<u>Verification:</u> The Designated Biologist shall submit in the monthly compliance report to the CPM copies of all written reports and summaries that document construction activities that have the potential to affect biological resources. If actions may affect biological resources during operation, the Biological Monitor(s), under the supervision of the Designated Biologist, shall be available for monitoring and reporting. During project operation, the Designated Biologist(s) shall submit record summaries in the annual compliance report unless their duties cease, as approved by the CPM.

BIOLOGICAL MONITOR SELECTION

BIO-3 The project owner's CPM-approved Designated Biologist shall submit the resume, at least three references, and contact information of the proposed Biological Monitors to the CPM for approval. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks.

<u>Verification:</u> The project owner shall submit the specified information to the CPM for approval at least 30 days prior to the start of any pre-construction site mobilization activities. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) have been trained, including the date when training was completed. If additional biological monitors are needed during construction, the specified information shall be submitted to the CPM for approval at least 10 days prior to their first day of monitoring activities.

DESIGNATED BIOLOGIST AND BIOLOGICAL MONITOR AUTHORITY

BIO-4 The project owner's construction/operation manager shall act on the advice of the Designated Biologist and Biological Monitor(s) to ensure conformance with the biological resources conditions of certification.

If required by the Designated Biologist and/or Biological Monitor(s) 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 an unauthorized 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 would be instituted as a result of the work stoppage.

If the Designated Biologist is unavailable for direct consultation, the Biological Monitor shall act on behalf of the Designated Biologist.

Verification: The project owner shall ensure that the Designated Biologist or Biological Monitor notifies the CPM immediately (and no later than the morning following 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 would be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner would be notified by the CPM that coordination with other agencies would require additional time before a determination can be made.

WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

- **BIO-5** The project owner shall develop and implement a project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM in consultation with USFWS and CDFW. The WEAP shall be administered to all on site personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, and subcontractors. The WEAP shall be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The WEAP shall:
 - 1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting electronic media and 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, explain the reasons for protecting these resources, and the function of flagging in designating sensitive resources and authorized work areas;
- 3. Discuss federal and state laws afforded to protect the sensitive species and explain penalties for violation of applicable laws, ordinances, regulations, and standards (e.g., federal, and state endangered species acts);
- 4. Place special emphasis on the known and potentially occurring bird species protected by the Migratory Bird Treaty Act and California Fish and Game Code, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection and status, penalties for violations, reporting requirements, and protection measures;
- 5. Include a discussion of fire prevention measures to be implemented by workers during project activities; request workers to dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;
- 6. Present the meaning of various temporary and permanent habitat protection measures;
- 7. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
- 8. Include a training acknowledgment form to be signed by each worker indicating that they received the WEAP training and shall abide by the guidelines.

<u>Verification:</u> The specific WEAP shall be administered by a competent individual(s) acceptable to the Designated Biologist. At least 45 days prior to the start of any preconstruction site mobilization, the project owner shall provide to the CPM a copy of the draft WEAP and all supporting written materials and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program. The CPM shall approve the WEAP materials prior to their use.

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. At least 10 days prior to site and related facilities mobilization, the project owner shall submit two copies of the CPM-approved final WEAP.

Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least six months after the start of commercial operation. Workers shall receive and be required to visibly display a hardhat sticker or certificate indicating that they have completed the required training.

Throughout the life of the project, the worker education program shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. The project owner will provide documentation of the dates of annual training and number of participants who complete the training in the Annual Compliance Report. During project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.

Training acknowledge forms shall be maintained by the project owner and shall be made available to the CPM upon request.

BIOLOGICAL RESOURCES MITIGATION IMPLEMENTATION AND MONITORING PLAN (BRMIMP)

- **BIO-6** The project owner shall develop a BRMIMP and submit two copies of the proposed BRMIMP to the CPM (for review and approval) and to CDFW and USFWS (for review and comment), if applicable, and shall implement the measures identified in the approved BRMIMP. The BRMIMP shall be prepared in consultation with the Designated Biologist and shall include the following:
 - 1. All biological resource mitigation, monitoring, and compliance measures proposed by the project owner and agreed to by staff;
 - 2. All biological resource conditions of certification identified in the Commission Decision as necessary to avoid or mitigate impacts;
 - 3. All biological resource mitigation, monitoring, and compliance measures required in other state or federal agency terms and conditions, such as those provided in the National Pollution Discharge Elimination System (NPDES) Construction Activities Storm Water General Permit;
 - 4. All sensitive biological resources to be impacted, avoided, or mitigated by project construction, operation, and closure;

- 5. All required mitigation measures for each sensitive biological resource;
- 6. A detailed description of measures that shall be taken to avoid or mitigate disturbances from construction and associated site clearance activities;
- 7. 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;
- Aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities; include one set <u>prior</u> to any site or related facilities mobilization disturbance and one set <u>subsequent</u> to completion of project construction;
- 9. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
- 10. Performance standards to be used to help decide if/when proposed mitigation and conditions are or are not successful;
- 11. All performance standards and remedial measures to be implemented if performance standards are not met;
- 12. A discussion of biological resources-related facility closure measures including a description of funding mechanism(s);
- 13. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and
- 14. A requirement to submit any sightings of any special-status species that are observed on or in proximity to the project site, or during project surveys, to the California Natural Diversity Database (CNDDB) per CDFW requirements.

<u>Verification:</u> The project owner shall provide the BRMIMP to the CPM for review (in consultation with CDFW) and approval at least 45 days prior to start of any preconstruction site mobilization.

If there are any permits that have not yet been received when the BRMIMP is first submitted, copies of these permits shall be submitted to the CPM within 5 days of their receipt, and a revised BRMIMP shall be submitted to the CPM within 10 days of receipt of permits by the project owner.

The project owner shall notify the CPM no less than 5 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 appropriate agencies to ensure no conflicts exist.

Implementation of BRMIMP measures shall be reported in the monthly compliance reports by the Designated Biologist (i.e., survey results, construction activities that were monitored, species observed).

Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written Construction Closure 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.

GENERAL IMPACT AVOIDANCE AND MINIMIZATION MEASURES

- **BIO-7** The project owner shall implement the following measures during site mobilization, construction, operation, and closure to manage their project site and related facilities in a manner to avoid or minimize impacts to biological resources:
 - <u>Delineation of Project Site.</u> The boundaries of all areas to be temporarily or permanently disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. All disturbances, vehicles, and equipment shall be confined to the flagged areas. All stakes, flagging, fencing or barriers shall be removed from the project site and vicinity of any waterbodies upon completion of project activities.
 - 2. Escape Ramp in Trench. At the end of each work day, the Designated Biologist, Biological Monitor, and/or trained site personnel shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled. If backfilling is not feasible, all trenches, bores, and other excavations shall have an escape ramp at each end constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees to allow any animals that may have become trapped in the trench to climb out overnight or they shall be covered completely to prevent wildlife access. Should wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and

relocate the individual to a safe location. If trained site personnel are inspecting trenches, bores, and other excavations and wildlife is trapped, they will immediately notify the Designated Biologist and/or Biological Monitor. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

- 3. <u>Soil Wind and Water Erosion Control</u>. Spoils shall not be stockpiled adjacent to any channels (i.e., Stanton Storm Channel, Carbon Creek Channel) to minimize potential for spoils to enter into these waterbodies. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants. The project owner shall keep the amount of water used for dust abatement to the minimum amount needed, and shall not allow water to form puddles. During construction, a Biological Monitor shall patrol these areas and shall take appropriate action to reduce water application rates where necessary.
- 4. <u>Notification of Take, Injury, or Death of Common Wildlife Species.</u> Site personnel shall report all inadvertent death or injuries of wildlife species to the appropriate project representative, including road kill. During construction, injured or dead animals detected by personnel in the project area shall be reported immediately to a Biological Monitor or Designated Biologist, who shall remove the carcass or injured animal promptly. During operations, the Plant Manager shall be notified who shall promptly notify the Designated Biologist to remove the carcass or injured animal. Species name, physical characteristics of the animal (sex, age class, length, weight), and other pertinent information shall be noted and reported in the compliance reports by the Designated Biologist.

The project owner shall immediately notify the Designated Biologist or Biological Monitor if a special-status species is taken or injured at the project site, or if a special status species is otherwise found dead or injured within the vicinity of the project. The Designated Biologist or Biological Monitor shall provide initial immediate notification to the CPM as well as CDFW and/or USFWS. The initial immediate notification shall include information regarding the location of the animal and/or carcass, date and incident location, time of incident, name of the Designated Biologist or Biological Monitor(s) present, the activity that caused the take or injury, and common and scientific names of species taken or injured. Following initial notification, the project owner shall send the CPM and CDFW and/or USFWS a written report via email within two (2) calendar days. The written report shall include the information in the initial notification and if possible provide a photograph of the species that was taken or injured, and preventative measures that will be implemented to prevent take or injury of special-status species.

- 5. <u>Hazardous Waste.</u> All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The project owner shall ensure that work shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. The Designated Biologist shall be informed immediately of any spills of hazardous material or wastes. Servicing of construction equipment shall take place only at designated areas. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.
- 6. <u>Trash Abatement and Feeding Wildlife.</u> All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris will be stored in animal proof containers and/or removed from the site each day. No deliberate feeding of wildlife will be allowed. Workers shall not feed wildlife or bring pets to the project site.
- 7. <u>Firearms and Dogs.</u> The project owner shall prohibit firearms and domestic dogs (except service dogs) from the project site, except those in the possession of authorized security personnel or local, state, or federal law enforcement officials.
- 8. <u>Erosion Control Materials.</u> Standard best management practices (BMPs) from the project Stormwater Pollution Prevention Plan shall be implemented during all phases of the project (construction, operation, and decommissioning) where storm water run-off from the site could enter adjacent creeks or channels. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into any jurisdictional waters. All disturbed soils within the project site shall be stabilized to reduce erosion potential, both during and following construction (See SOIL & WATER-1).
- 9. <u>Invasive Weeds.</u> The project owner shall implement the following measures during construction and operation to prevent the spread and propagation of nonnative, invasive weeds:

- a. Limit the size of any vegetation and/or ground disturbance to the absolute minimum and limit ingress and egress to defined routes;
- b. Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations;
- c. Invasive non-native species shall not be used in landscaping plans and erosion control;
- d. Monitor and rapidly implement control measures to ensure early detection and eradication of weed invasions.
- 10. <u>Herbicides.</u> During construction and operation, only herbicides containing a harmless dye and registered with the California Department of Pesticide Regulation (DPR) shall be used. All herbicides shall be applied in accordance with regulations set by DPR. All herbicides shall be used according to labeled instructions. Labeled instructions for the herbicide used shall be made available to the CPM upon request. No herbicide shall be applied when winds are greater than five (5) miles per hour.
- 11. <u>Rodenticides and Insecticides</u>. During construction and operation, the project owner shall not use rodenticides and/or insecticides on the project site without prior written permission from the CPM. The project owner shall not use any second generation anticoagulant rodenticide (brodifacoum, bromadiolone, difethialone, and difenacoum) on the project site. The project owner shall not use any first generation anticoagulant rodenticide (diphacinone, chlorophacinone, and warfarin) on the project site without prior written permission from the CPM.

<u>Verification:</u> All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed and which items are still outstanding.

PRE-CONSTRUCTION NEST SURVEYS AND IMPACT AVOIDANCE AND MINIMIZATION MEASURES FOR BREEDING BIRDS

BIO-8 Pre-construction nest surveys shall be conducted if construction work will occur from February 15 through August 31. The term "work" shall be defined as all site assessment, pre-construction activities, site mobilization, and

ground disturbing construction activities. The Designated Biologist or Biological Monitor shall perform surveys in accordance with the following guidelines:

- 1. Surveys shall cover all potential nesting habitat and substrate within the project site and any offsite facilities (e.g. generator tie line and natural gasline, worker parking areas and staging areas) and publically-accessible areas within 500 feet of the project boundary. These surveys shall include the orders *Falconiformes* and *Strigiformes* (raptors and owls). Surveys shall be conducted at appropriate nesting times and concentrate on potential roosting or perch sites. Any habitat areas adjacent to the project site but not publically accessible shall be surveyed with binoculars.
- 2. At least two pre-construction surveys shall be conducted, separated by a minimum 10-day interval. Pre-construction surveys shall be conducted no more than 14 days prior to initiation of construction activity. One survey shall be conducted within the 3-day period preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation.
- 3. If active nests are detected during on-site surveys, a no-disturbance buffer zone (protected area surrounding the nest) shall be established around each nest with fencing, flagging and/or signage, as appropriate. The size of each buffer zone shall be determined by the Designated Biologist in consultation with the CPM (in coordination with CDFW and USFWS). If any nests of birds of prey are observed, these nests shall be designated an ecologically sensitive area and protected (while occupied) by a minimum 500-foot radius during project construction. Off-site special-status nests shall be mapped and monitored, but shall not be fenced. Nest locations shall be mapped using GPS technology and submitted, along with a weekly report stating the survey results, to the CPM in the monthly compliance reports.
- 4. If active nests of special-status species are detected during surveys, the Designated Biologist or Biological Monitor shall inform the CPM within one business day, and shall monitor all on-site and off-site nests at least once per week, to determine whether birds are being disturbed. If signs of disturbance or distress are observed, the Designated Biologist or Biological Monitor shall immediately implement adaptive measures to

reduce disturbance in coordination with the CPM. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed, or placement of visual screens or sound-dampening structures between the nest and construction activity, where possible.

- 5. If active nests are detected during surveys, the Designated Biologist or Biological Monitor shall monitor the nest until he or she determines that nestlings have fledged and dispersed or the nest is no longer active. Activities that might, in the opinion of the Designated Biologist or Biological Monitor, disturb nesting activities (e.g., exposure to exhaust), shall be prohibited within the buffer zone until such a determination is made.
- 6. The Designated Biologist shall provide the CPM and CDFW with field notes or other documentation within 24 hours of completing the surveys. An email report with a letter report to follow may be used. The email/letter report shall state how impacts of any nesting birds will be avoided by citing the appropriate information from this condition of certification. The letter report/email report shall include the time, date, methods, and duration of the surveys; identity and qualifications of the surveyor(s); and a list of species observed.
- 7. If active nests are detected during the surveys, the reports shall include a map or aerial photo identifying the location of the nest(s), species, and shall depict the boundaries of the proposed no-disturbance buffer zone around the nest(s).

<u>Verification:</u> The project owner shall provide notification to the CPM, CDFW, and USFWS at least 2 weeks prior to initiating surveys; notification shall include the name and resume of the biologist(s) conducting the surveys and the timing of the surveys. Prior to the start of any pre-construction site mobilization, the project owner shall provide the CPM, CDFW, and USFWS a letter-report describing the findings of the preconstruction nest surveys. All impact avoidance and minimization measures related to nesting birds shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist.

JACK AND BORE DRILLING BEST MANAGEMENT PRACTICES

BIO-9 During construction, using jack and bore drilling techniques, the Designated Biologist or Biological Monitor must be present at all times. The Designated

Biologist or Biological Monitor must be allowed to monitor all activities pertaining to drilling under Carbon Creek Channel, and shall be given authority to do the following, including but not limited to:

- 1. visually inspect the drill path,
- 2. monitor the creek for evidence of frac-out or drilling fluid release,
- 3. examining the drilling fluid pressures and return flows,
- 4. approval of the drilling setup locations,
- verifying the perimeter of the work site is adequately flagged prior_to equipment setup, and
- 6. having the authority to halt any drilling if the operations lead to frac-out or the drilling fluid pressures and return flows drop.

<u>Verification:</u> The Designated Biologist or Biological Monitor must notify the CPM and CDFW (no later than the following morning of the incident, or Monday morning in the case of a weekend) in the event of frac-out. The CPM and CDFW must also be notified of any non-compliance or a halt of any jack and bore drilling operations. The project owner shall notify the CPM and CDFW 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.

CUL-1 APPOINTMENT AND QUALIFICATIONS OF CULTURAL RESOURCES PERSONNEL

A. CULTURAL RESOURCE SPECIALIST

1. Appointment and Qualifications

The project owner shall assign a Cultural Resources Specialist (CRS) and at least one Alternate CRS to the project. The project owner shall submit the resumes of the proposed CRS and Alternative CRS(s), with at least three references and contact information, to the Energy Commission compliance project manager (CPM) for review and approval.

The CRS and Alternate CRS(s) shall have training and background that conform to the U.S. Secretary of the Interior's Professional Qualifications Standards, as published in Title 36, Code of Federal Regulations, Part 61. In addition, the CRS and Alternate CRS(s) shall have the following qualifications:

- 1. A background in anthropology, archaeology, history, architectural history, or a related field;
- At least 10 years of archaeological or historical experience (as appropriate for the project site), with resources mitigation and fieldwork;
- 3. At least three years of field experience in California; and
- 4. At least three years of experience in a decision-making capacity on cultural resources projects in California and the appropriate training and experience to knowledgably make recommendations regarding the significance of cultural resources.

The project owner may replace the CRS by submitting the required resume, references and contact information of the proposed replacement CRS to the CPM.

2. Duties of Cultural Resources Specialist

The CRS shall manage all cultural resource monitoring, mitigation, curation, and reporting activities, and any pre-construction cultural resource activities, unless management of these is otherwise provided for in accordance with the cultural resource conditions of certification (conditions). The CRS shall serve as the primary point of contact on all cultural resource matters for the Energy Commission. The CRS shall obtain the services of Cultural Resources Monitor(s) (CRMs), Native American Monitor(s) (NAMs), and other technical specialist(s), if needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS makes recommendations regarding the eligibility for listing in the California Register of Historical Resources (CRHR) of any cultural resources that are newly discovered or that may be affected in an unanticipated manner.

After all ground disturbances are completed and the CRS has fulfilled all responsibilities specified in these cultural resources conditions, the project owner may discharge the CRS, after receiving approval from the CPM.

The cultural resource conditions shall continue to apply during operation of the proposed power plant, limited to those ground disturbing activities in non-fill sediments.

B. CULTURAL RESOURCES MONITORS

1. Appointment and Qualifications

The CRS may assign Cultural Resources Monitor(s) (CRMs). CRMs shall have the following qualifications:

- 1. B.S. or B.A. degree in anthropology, archaeology, historical archaeology, or a related field; and one year of archaeological field experience in California; or
- 2. A.S. or A.A. degree in anthropology, archaeology, historical archaeology, or a related field, and four years of archaeological field experience in California; or
- 3. Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and two years of archaeological field experience in California.

C. NATIVE AMERICAN MONITORS

1. Appointment and Qualifications:

Preference in selecting NAM(s) shall be given to Native Americans with:

- 1. Traditional ties to the area being monitored.
- 2. Knowledge of local historic and prehistoric Native American village sites.
- 3. Knowledge and understanding of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- 4. Ability to effectively communicate the requirements of Health and Safety Code, Section 7050.5 and Public Resources Code, Section 5097.9 et seq.
- 5. Ability to work with law enforcement officials and the Native American Heritage Commission to ensure the return of all associated grave goods taken from a Native American grave during excavation.
- 6. Ability to travel to project sites within traditional tribal territory.
- 7. Knowledge and understanding of Title 14, California Code of Regulations, Section 15064.5.
- 8. Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding CEQA mitigation provisions.
- Ability to read a topographical map and be able to locate sites and reburial locations for future inclusions in the Native American Heritage Commission's Sacred Lands Inventory
- 10. Knowledge and understanding of archaeological practices, including the phases of archaeological investigation.
- 2. NAMs that Qualify as CRSs or CRMs

A NAM that qualifies as either a CRS or CRM, in addition to being a NAM, may also function as one and only one of the following: CRS or CRM.

D. CULTURAL RESOURCES TECHNICAL SPECIALISTS

The resume(s) of any additional technical specialist(s), e.g., geoarchaeologist, historical archaeologist, historian, architectural historian, and/or physical anthropologist, shall be submitted to the CPM for approval. The resume of each proposed specialist shall demonstrate that their training and background meet the U.S. Secretary of Interior's Professional Qualifications Standards for their specialty (if appropriate), as published in Title 36, Code of Federal Regulations, Part 61, and show the completion of appropriate graduate-level coursework. The resumes of specialists shall include the names and telephone numbers of contacts familiar with the work of these persons on projects referenced in the resumes and demonstrate to the satisfaction of the CPM that these persons have the appropriate training and experience to undertake the required research. The project owner may name and hire any specialist prior to certification. All specialists are under the supervision of the CRS.

- The project owner shall submit the specified information at least 75 days prior to the start of (1) ground disturbance (as defined in the Compliance Conditions and Compliance Monitoring Plan section); (2) post-certification cultural resources activities (including, but not limited to, "survey", "in-field data recording," "surface collection," "testing," "data recovery" or "geoarchaeology"); or (3) site preparation or subsurface soil work during pre-construction activities or site mobilization.
- 2. The project owner may replace a CRS by submitting the required resume, references and contact information to the CPM at least 10 working days prior to the termination or release of the then-current CRS. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent CRS is proposed to the CPM for consideration.
- 3. At least 20 days prior to ground disturbance, the CRS shall provide proof of qualifications for any anticipated CRMs, NAMS, and additional specialists for the project to the CPM.
- 4. If efforts to obtain the services of a qualified NAM are unsuccessful, the project owner shall inform the CPM of this situation in writing at least 30 days prior to the beginning of post-certification cultural resources field work or construction-related ground disturbance.

- 5. At least 5 days prior to additional CRMs or NAMs beginning on-site duties during the project, the CRS shall submit the qualifications of the proposed CRMs and NAMs to the CPM for review and approval.
- 6. At least 10 days prior to any technical specialists beginning tasks, the resume(s) of the specialists shall be provided to the CPM for review and approval.
- 7. At least 10 days prior to the start of construction-related 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.
- 8. No ground disturbance shall occur prior to CPM approval of the CRS and alternates, unless such activities are specifically approved by the CPM.

CUL-2 INFORMATION TO BE PROVIDED TO CRS

Prior to the start of ground disturbance, the project owner shall provide the CRS with copies of the application for certification (AFC), data responses, confidential cultural resources reports, all supplements, the Energy Commission staff's Cultural Resources Final Staff Assessment, and the cultural resources Conditions from the Final Decision for the project, if the CRS does not already possess copies of these materials. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, and all laydown areas. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:24,000 and 1 inch = 200 feet, respectively) for plotting cultural features or materials. If the CRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the CRS and CPM. The CPM shall review map submittals and, in consultation with the CRS, approve those that are appropriate for use in cultural resources planning activities. No ground disturbance shall occur prior to CPM approval of maps and drawings, unless such activities are specifically approved by the CPM.

Maps shall include any National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) -eligible cultural resources, including any historic built environment resources, identified in the project area of analysis.

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

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

The project owner shall notify the CRS and CPM of any changes to the scheduling of the construction phases.

The project owner shall provide the documents described in the first paragraph of this condition to new CRSs in the event that the approved CRS is terminated or resigns.

Verification:

- At least 40 days prior to the start of ground disturbance, the project owner shall provide the CPM notice that the AFC, data responses, confidential cultural resources documents, all supplements, FSA, and Final Commission Decision have been provided to the CRS, if needed, and the subject maps and drawings to the CRS and CPM. The CPM will review submittals in consultation with the CRS and approve maps and drawings suitable for cultural resources planning activities.
- 2. At least 15 days prior to the start of ground disturbance, if there are changes to any project-related footprint, the project owner shall provide revised maps and drawings for the changes to the CRS and CPM.
- 3. At least 15 days prior to the start of each phase of a phased project, the project owner shall submit the appropriate maps and drawings, if not previously provided, to the CRS and CPM.
- 4. Weekly, during ground disturbance, a schedule of the next week's anticipated project activity shall be provided to the CRS and CPM by letter, e-mail, or fax.
- 5. Within 5 days of changing the scheduling of phases of a phased project, the project owner shall provide written notice of the changes to the CRS and CPM.
- 6. If a new CRS is approved by the CPM, as provided for in CUL-1, the project owner shall provide the CPM notice that the AFC, data responses, confidential cultural resources documents, all supplements, FSA, Final Commission Decision, and maps and drawings have been provided to the new CRS within 10 days of such approval.

CUL-3 CULTURAL RESOURCES MITIGATION AND MONITORING PLAN (CRMMP)

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

The CRMMP shall include the following elements and measures.

- The following statement included in the Introduction: "Any discussion, summary, or paraphrasing of the conditions of certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP."
- 2. A proposed general research design that includes a discussion of archaeological research questions and testable hypotheses specifically applicable to the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. The research design will specify that the preferred treatment strategy for any buried archaeological deposits is avoidance. A specific mitigation plan shall be prepared for any unavoidable impacts to any CRHR-eligible (as determined by the CPM) resources. A prescriptive treatment plan may be included in the CRMMP for limited data types.
- 3. Specification of the implementation sequence and the estimated time frames needed to accomplish all project-related tasks during the ground-disturbance and post-ground–disturbance analysis phases of the project.

- 4. Identification of the person(s) expected to perform each of the tasks, their responsibilities, and the reporting relationships between project construction management and the mitigation and monitoring team.
- 5. A description of the manner in which Native American observers or monitors will be included, the procedures to be used to select them, and their role and responsibilities.
- 6. A description of all impact-avoidance measures (such as flagging or fencing) to prohibit or otherwise restrict access to sensitive resource areas that are to be avoided during ground disturbance, construction, and/or operation, and identification of areas where these measures are to be implemented. The description shall address how these measures would be implemented prior to the start of ground disturbance and how long they would be needed to protect the resources from project-related effects.
- 7. A statement that all encountered cultural resources over 50 years old shall be recorded on Department of Parks and Recreation (DPR) 523 forms, mapped and photographed. In addition, all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery) shall be curated in accordance with the California State Historical Resources Commission's (SHRC's) *Guidelines for the Curation of Archaeological Collections* (1993, or future updated guidelines from the SHRC), into a retrievable storage collection in a public repository or museum.
- 8. A statement that the project owner will pay all curation fees for artifacts recovered and for related documentation produced during cultural resources investigations conducted for the project. The project owner shall identify three possible curation facilities that could accept cultural resources materials resulting from project activities.
- 9. A statement demonstrating when and how the project owner will comply with Health and Human Safety Code 7050.5(b) and Public Resources Code 5097.98(b) and (e), including the statement that the project owner will notify the CPM and the NAHC of the discovery of human remains.
- 10. A statement that the CRS has access to equipment and supplies necessary for site mapping, photography, and recovery of any cultural resource materials that are encountered during ground disturbance and cannot be treated prescriptively.

11. A description of the contents, format, and review and approval process of the final Cultural Resource Report (CRR), which shall be prepared according to *Archaeological Resource Management Report (ARMR)* guidelines.

Verification:

- 1. Upon approval of the CRS proposed by the project owner, the CPM will provide to the project owner an electronic copy of the draft model CRMMP for the CRS.
- 2. At least 30 days prior to the start of ground disturbance, the project owner shall submit the CRMMP to the CPM for review and approval. If the location of cultural resources is identified in the CRMMP, the project owner shall submit the CRMMP under confidential cover and staff will redact the confidential information prior to submitting the CRMMP to the project compliance docket.
- 3. At least 30 days prior to the start of ground disturbance, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected as a result of the archaeological investigations (survey, testing, data recovery).
- 4. Within 90 days after completion of ground disturbance (including landscaping), if cultural materials requiring curation were generated or collected, the project owner shall provide to the CPM a copy of an agreement with, or other written commitment from, a curation facility that meets the standards stated in the State Historic Resources Commission's (SHRC) *Guidelines for the Curation of Archaeological Collections* (1993, or future updated guidelines from SHRC), to accept the cultural materials from this project. Any agreements concerning curation will be retained and available for audit for the life of the project.

CUL-4 FINAL CULTURAL RESOURCES REPORT (CRR)

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

If the project owner requests a suspension of ground disturbance and/or construction activities, then a draft CRR that covers all cultural resources activities associated with the project shall be prepared by the CRS and submitted to the CPM for review and approval within 30 days of the suspension/extension request. The draft CRR shall be retained at the project site in a secure facility until ground disturbance and/or construction resumes or the project is withdrawn. If the project is withdrawn, then a final CRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification:

- 1. Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CRR to the CPM for review and approval.
- 2. Within 90 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CRR to the CPM for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification of receipt shall be included in an appendix.
- 3. Within 10 days after CPM approval of the CRR, the project owner shall provide documentation to the CPM confirming that copies of the final CRR have been provided to the CHRIS, the curating institution, if archaeological materials were collected, and to the tribal chairpersons of any Native American groups requesting copies of project-related reports.

CUL-5 CULTURAL RESOURCES WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

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 at the project site, along the linear facilities routes, and at laydown areas, roads, and other ancillary areas. The cultural resources part of this training shall be prepared by the CRS, may be conducted by any member of the archaeological team, and may be presented in the form of a video. The CRS is encouraged to include a Native American presenter in the training to contribute the Native American perspective on archaeological and ethnographic resources. During the training and during construction, the CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended, but must be resumed when ground disturbance, such as landscaping, resumes. The training shall include:

- 1. A discussion of applicable laws and penalties under law;
- 2. Samples or visuals of artifacts that might be found in the project vicinity;
- 3. A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed;
- 4. A discussion of what prehistoric and historical archaeological deposits look like at the surface and when exposed during construction, and the range of variation in the appearance of such deposits;
- 5. Instruction that the CRS, Alternate CRS, and CRMs have the authority to halt ground disturbance in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;
- Instruction that employees, if the CRS, Alternate CRS, or CRMs are not present, 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;
- 7. An informational brochure that identifies reporting procedures in the event of a discovery;
- 8. An acknowledgement form signed by each worker indicating that they have received the training; and
- 9. 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 such activities are specifically approved by the CPM.

Verification:

1. At least 30 days prior to the beginning of ground disturbance, the CRS shall provide the cultural resources WEAP training program draft text and/or training video, graphics, and the informational brochure, to the CPM for review and approval.

- 2. At least 15 days prior to the beginning of ground disturbance, the CPM will provide to the project owner a WEAP Training Acknowledgement form for each WEAP-trained worker to sign.
- 3. Monthly, until ground disturbance is completed, the project owner shall provide in the Monthly Compliance Report (MCR) the WEAP Training Acknowledgement forms of workers who have completed the training in the prior month and a running total of all persons who have completed training to date.

CUL-6 CULTURAL RESOURCES MONITORING

The project owner shall ensure that a CRS, alternate CRS, or CRMs shall be on site for all ground disturbance in areas slated for excavation into non-fill (native) sediments.

Prior to the start of ground disturbance, the project owner shall notify the CPM and all interested Native Americans of the date on which ground disturbance will ensue. Where excavation equipment is actively removing dirt concurrently at more than one location at a time, full-time archaeological monitoring shall require at least one monitor per excavation area. Where excavated material is stockpiled on-site, one monitor shall be present during loading activities of the stockpiles material into a truck for disposal.

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

The project owner shall obtain the services of one or more NAM(s) to monitor construction-related ground disturbance in areas slated for excavation into non-fill (native) sediments. If qualified, a NAM can also serve as the CRM or CRS, but not both. Preference in selecting a NAM shall be given to Native Americans with traditional ties to the area that will be monitored. If efforts to obtain the services of a qualified NAM are unsuccessful, the project owner shall immediately inform the CPM. The CPM will either identify potential monitors or will allow construction-related ground disturbance to proceed without a NAM.

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered. On forms provided by the CPM, CRMs shall keep a daily log of any monitoring and other cultural resources activities and any instances of non-

compliance with the conditions and/or applicable LORS. The daily monitoring logs shall, at a minimum, include the following information.

- First and last name of the CRM and any accompanying NAM.
- Time in and out.
- Weather. Specify if weather conditions led to work stoppages.
- Work location (project component). Provide specifics—.e.g., power block, landscaping.
- Proximity to site location. Specify if work conducted within 1000 feet of a known cultural resource.
- Work type (machine).
- Work crew (company, operator, and foreman).
- Depth of excavation.
- Description of work.
- Stratigraphy.
- Artifacts, listed with the following identifying features:
- Field artifact #: When recording artifacts in the daily monitoring logs, the CRS shall institute a field numbering system to reduce the likelihood of repeat artifact numbers. A typical numbering system could include a project abbreviation, monitor's initials, and a set of numbers given to that monitor: e.g., Stn-MB-123.
- Description.
- Measurements.
- Universal Transverse Mercator (UTM) coordinates.
- Whether artifacts are likely to be isolates or components of larger resources.
- Assessment of significance of any finds.
- Actions taken.
- Plan for the next work day.

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- A cover sheet shall be submitted with each day's monitoring logs, and shall at a minimum include the following:
 - Count and list of first and last names of all CRMs and of all NAMs for that day.
 - General description (in paragraph form) of that day's overall monitoring efforts, including monitor names and locations.
 - Any reasons for halting work that day.
 - Count and list of all artifacts found that day: include artifact #, location (i.e., grading in Unit X), measurements, UTMs, and very brief description (i.e., historic can, granitic biface, quartzite flake).
 - Whether any artifacts were found out of context (i.e., in fill, caisson drilling, flood debris, spoils pile).

Copies of the daily monitoring logs and cover sheets shall be provided by email from the CRS to the CPM, as follows:

- Each day's monitoring logs and cover sheet shall be merged into one PDF document.
- The PDF title and headings, and emails, shall clearly indicate the date of the applicable monitoring logs.
- PDFs for any revised or resubmitted versions shall use the word "revised" in the title.

Daily and/or weekly maps shall be submitted along with the monitoring logs as follows:

- The CRS shall provide daily and/or weekly maps of artifacts at the request of the CPM. A map shall also be provided if artifact locations show complexity, high density, or other unique considerations.
- Maps shall include labeled artifacts, project boundaries, previously recorded sites and isolates, aerial imagery background, and appropriate scales.

From the daily monitoring logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

- The Cultural Resources section of the MCR shall be prepared in coordination with the CRS, and shall include a monthly summary report of cultural resources-related monitoring. The summary shall:
 - List the number of CRMs and NAMs on a daily basis, as well as provide monthly monitoring-day totals.
 - Give an overview of cultural resource monitoring work for that month, and discuss any issues that arose.
 - Describe fulfillment of requirements of each cultural mitigation measure.
 - Summarize the confidential appendix to the MCR, without disclosing any specific confidential details.
 - Include the artifact concordance table (as discussed under the next bullet point), but with removal of UTMs.
 - A concordance table that matches field artifact numbers with the artifact numbers used in the DPR forms shall be included. The sortable table shall contain each artifact's date of collection and UTM numbers, and note if an artifact has been deaccessioned or otherwise does not have a corresponding DPR form. Any post-field log recordation changes to artifact numbers shall also be noted.
 - o DPR forms shall be submitted as one combined PDF.
 - The PDF shall organize DPR forms by site and/or artifact number.
 - The PDF shall include an index and bookmarks.
 - If artifacts from a given site location (in close proximity of each other or an existing site) are collected month after month, and if agreed upon with the CPM, a final updated DPR for the site may be submitted at the completion of monitoring. The monthly concordance table shall note that the DPR form for the included artifacts is pending.

Each MCR, prepared under supervision of the CRS, shall be accompanied by a confidential appendix that contains completed DPR 523A forms for all artifacts recorded or collected in that month. For any artifact without a corresponding DPR form, the CRS shall specify why the DPR form is not applicable or pending (i.e. as part of a larger site update). The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural resources-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM.

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

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

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

Upon becoming aware of any incidents of non-compliance with the conditions and/or applicable LORS, the CRS and/or the project owner shall notify the CPM.

The CRS shall also recommend corrective action to resolve the problem or achieve compliance with the conditions. When the issue is resolved, the CRS shall write a report describing the issue, the resolution of the issue, and the effectiveness of the resolution measures. This report shall be provided in the next MCR for the review of the CPM.

Verification:

- 1. At least 30 days prior to the start of ground disturbance, the CPM will notify all Native Americans on the Native American Heritage Commission's contact list of the date on which the project's ground disturbance will begin.
- 2. At least 30 days prior to the start of ground disturbance, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log and information to be included in the cover sheet for the daily monitoring logs.
- 3. While monitoring is on-going, the project owner shall submit each day's monitoring logs and cover sheet merged into one PDF document by email within 24 hours.

- 4. The CRS and/or project owner shall notify the CPM of any incidents of noncompliance with the conditions and/or applicable LORS by telephone or email within 24 hours.
- 5. The CRS shall provide daily maps of artifacts along with the daily monitoring logs if more than 10 artifacts are found per day, or as requested by the CPM.
- 6. The CRS shall provide weekly maps of artifacts if more than 50 artifacts are found per week, or as requested by the CPM. The map shall be submitted within two business days after the end of each week.
- 7. Within 15 days of receiving from a local Native American group a request that a NAM be employed, the project owner shall submit a copy of the request and a copy of a response letter to the group notifying them that a NAM has been employed and identifying the NAM.
- 8. While monitoring is on-going, the project owner shall submit monthly MCRs and accompanying weekly summary reports. The project owner shall attach any new DPR 523A forms, under confidential cover, completed for finds treated prescriptively, as specified in the CRMMP.
- 9. Final updated DPRs with sites (where artifacts are collected month after month) can be submitted at the completion of monitoring, as agreed upon with the CPM.
- 10.At least 24 hours prior to implementing a proposed change in monitoring level, the project owner shall submit to the CPM, for review and approval, a letter or email (or some other form of communication acceptable to the CPM) detailing the CRS's justification for changing the monitoring level.
- 11.At least 24 hours prior to reducing or ending daily reporting, the project owner shall submit to the CPM, for review and approval, a letter or email (or some other form of communication acceptable to the CPM) detailing the CRS's justification for reducing or ending daily reporting.
- 12. Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information.

CUL-7 POWERS OF CRS / CULTURAL RESOURCES DISCOVERY PROTOCOLS

The CRS shall have the authority to halt ground disturbance in the event of a discovery. Redirection of ground disturbance shall be accomplished under the direction of the construction supervisor in consultation with the CRS.

In the event that a cultural resource over 50 years of age is found (or if, determined exceptionally significant by the CRS), or impacts to such a resource can be anticipated, ground disturbance shall be halted or redirected in the immediate vicinity of the discovery sufficient to ensure that the resource is protected from further impacts. If the discovery includes human remains, the project owner shall comply with the requirements of Health and Human Safety Code § 7050.5(b) and shall additionally notify the CPM and the NAHC of the discovery of human remains. No action with respect to the disposition of human remains of Native American origin shall be initiated without direction from the CPM. Monitoring, including Native American monitoring, and daily reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere, while the halting or redirection of ground disturbance in the vicinity of the discovery shall remain in effect until the CRS has visited the discovery, and all of the following have occurred:

- 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, and has provided a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of CRHR eligibility, and recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR eligibility has been made.
- 2. If the discovery would be of interest to Native Americans, the CRS has notified all Native American groups that expressed a desire to be notified in the event of such a discovery.
- 3. The CRS has completed field notes, measurements, and photography for a DPR 523 "Primary Record" form. Unless the find can be treated prescriptively, as specified in the CRMMP, the "Description" entry of the DPR 523 "Primary Record" form shall include a recommendation on the CRHR/NRHP eligibility of the discovery. The project owner shall submit completed forms to the CPM.

- 4. The CRS, the project owner, and the CPM have conferred, and the CPM has concurred with the recommended eligibility of the discovery and approved the CRS's proposed data recovery, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed.
- 5. Ground disturbance may resume only with the approval of the CPM.

Verification:

- 1. 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 ground disturbance in the vicinity of a cultural resources discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.
- 2. Unless the discovery can be treated prescriptively, as specified in the CRMMP, completed DPR 523 forms for resources newly discovered during ground disturbance shall be submitted to the CPM for review and approval no later than 24 hours following the notification of the CPM, or 48 hours following the completion of data recordation/recovery, whichever the CRS decides is more appropriate for the subject cultural resource.
- 3. Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all Native American groups that expressed a desire to be notified in the event of such a discovery, and the CRS must inform the CPM when the notifications are complete.
- 4. No later than 30 days following the discovery of any Native American cultural materials, the project owner shall submit to the CPM copies of the information transmittal letters sent to the chairpersons of the Native American tribes or groups who requested the information. Additionally, the project owner shall submit to the CPM copies of letters of transmittal for all subsequent responses to Native American requests for notification, consultation, and reports and records.
- 5. Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by Native Americans in response to the project owner's transmittals of information.

CUL-8 FILL SOILS

If fill soils must be acquired from a non-commercial borrow site or disposed of to a non-commercial disposal site, unless less-than-five-year-old surveys of these sites for archaeological resources are provided to, and approved by, the CPM, the CRS shall survey the borrow or disposal site(s) for cultural resources and record on DPR 523 forms any that are identified. When the survey is completed, the CRS shall convey the results and recommendations for further action to the project owner and the CPM, who will determine what, if any, further action is required. If the CPM determines that significant archaeological resources that cannot be avoided are present at the borrow site, the project owner must either select another borrow or disposal site or implement **CUL-7** prior to any use of the site. The CRS shall report on the methods and results of these surveys in the final CRR.

Verification:

- 1. As soon as the project owner knows that a non-commercial borrow site and/or disposal site will be used, he/she shall notify the CRS and CPM and provide documentation of previous archaeological survey, if any, dating within the past five years, for CPM approval.
- 2. In the absence of documentation of recent archaeological survey, at least 30 days prior to any soil borrow or disposal activities on the non-commercial borrow and/or disposal sites, the CRS shall survey the site(s) for archaeological resources. The CRS shall notify the project owner and the CPM of the results of the cultural resources survey, with recommendations, if any, for further action.

HAZARDOUS MATERIALS MANAGEMENT

HAZ-1 The project owner shall not use any hazardous materials not listed in Appendix B, below, or in greater quantities or strengths than those identified by chemical name in Appendix B, below, unless approved in advance by the compliance project manager (CPM).

<u>Verification:</u> The project owner shall provide to the CPM, in the Annual Compliance Report, the Hazardous Materials Business Plan's list of hazardous materials and quantities contained at the facility.

HAZ-2 The project owner shall concurrently provide a Hazardous Materials Business Plan (HMBP), a Spill Prevention Control and Countermeasure Plan (SPCC), and a Risk Management Plan (RMP) to the Orange County Environmental Health Division (OCEHD) and the CPM for review. After receiving comments from the OCEHD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final Hazardous Materials Business Plan and RMP shall then be provided to the OCEHD for information and to the CPM for approval.

<u>Verification:</u> At least 30 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final HMPB and SPCC to the CPM for approval.

At least 30 days prior to delivery of aqueous ammonia to the site, the project owner shall provide the final RMP to the Certified Unified Program Agency (the Orange County Environmental Health Division) for information and to the CPM for approval.

HAZ-3 The project owner shall develop and implement a Safety Management Plan for delivery of aqueous ammonia and other liquid hazardous materials by tanker truck. 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 incompatible hazardous materials including provisions to maintain lockout control by a power plant employee not involved in the delivery or transfer operation. This plan shall be applicable during construction, commissioning, and operation of the power plant.

Verification: At least 30 days prior to the delivery of any liquid hazardous material to the facility, 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 either to the ASME Code for Unfired Pressure Vessels, Section VIII, Division 1 or to the API Standard 620. The storage tank shall be protected by a secondary containment that drains to an underground vault via (3) 1 square foot openings capable of holding precipitation from a 24-hour, 25-year storm event plus 100 percent of the capacity of the largest tank within its boundary. The storage tank shall have ammonia detectors positioned to detect an ammonia leak or loss of containment. The final design drawings and specifications for the ammonia storage tank, secondary containment basin, and underground vault shall be submitted to the CPM.

<u>Verification:</u> At least 30 days prior to start of construction of the aqueous ammonia storage and transfer facility, the project owner shall submit final design drawings and specifications for the ammonia storage tank, ammonia pumps, ammonia detectors around the ammonia storage tank, secondary containment basin, and underground vault to the CPM for review and approval.

HAZ-5 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 MC-307/DOT-407.

<u>Verification:</u> At least 30 days prior to receipt of aqueous ammonia on site, 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-6 Prior to initial delivery, the project owner shall direct vendors delivering bulk quantities (>800 gallons per delivery) of hazardous material (e.g., aqueous ammonia, lubricating and insulating oils) to the site to use only the route approved by the CPM (from Interstate 5 or State Route 91, exiting on Beach Boulevard and traveling south to Katella Avenue, then east on Katella Avenue and turn left and head north on Dale Avenue to the Stanton entrance). The project owner shall obtain approval of the CPM if an alternate route is desired.

Verification: At least 60 days prior to initial receipt of bulk quantities (>800 gallons per delivery) of hazardous materials (e.g., aqueous ammonia, lubricating and insulating oils) and at least 10 days prior to a new vendor delivery of bulk quantities (>800 gallons per delivery), the project owner shall submit a copy of the letter containing the route restriction directions that were provided to the hazardous materials vendor to the CPM for review and approval.

HAZ-7 Prior to commencing construction, a site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to the CPM for review and approval. The Construction Site Security Plan shall include the following:

- 1. perimeter security consisting of fencing enclosing the construction area;
- 2. security guards during hours when construction personnel are not present at the site;
- 3. site access control consisting of a check-in procedure or tag system for construction personnel and visitors;
- 4. written standard procedures for employees, contractors, and vendors when encountering suspicious objects or packages on site or off site;
- 5. protocol for contacting law enforcement and the CPM in the event of suspicious activity, incident or emergency; and,
- 6. evacuation procedures.

<u>Verification:</u> At least 30 days prior to commencing construction, the project owner shall notify the CPM that a site-specific Construction Security Plan is available for review and approval.

HAZ-8 The project owner shall also prepare a site-specific security plan for the commissioning and operational phases that would be available to the CPM for review and approval. The project owner shall implement site security measures that address physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described below (as per NERC Security Guideline for the Electricity Sector: Physical Security v2.0).

The Operation Security Plan shall include the following:

- 1. permanent full perimeter fence or wall, at least eight feet high and topped with barbed wire or the equivalent (and with slats or other methods to restrict visibility if a fence is selected);
- 2. main entrance security gate, either hand operated or motorized;
- 3. evacuation procedures;
- 4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;

- 5. written standard procedures for employees, contractors, and vendors when encountering suspicious objects or packages on site or off site;
 - A. a statement (refer to sample, **Attachment A**), signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to determine the accuracy of employee identity and employment history and shall be conducted in accordance with state and federal laws regarding security and privacy;
 - B. a statement(s) (refer to sample, Attachment B), signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner), that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractors who visit the project site;
- 6. site access controls for employees, contractors, vendors, and visitors;
- a statement(s) (refer to sample, Attachment C), signed by the owners or authorized representative of hazardous materials transport vendors, certifying that they have prepared and implemented security plans in compliance with 49 CFR 172.880, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B;
- 8. closed circuit TV (CCTV) monitoring system, recordable, and viewable in the remote power plant control room with cameras able to pan, tilt, and zoom, have low-light capability, and able to view 100 percent of the perimeter fence, the ammonia storage tank, the two outside entrances to the site; and,
- 9. additional measures to ensure adequate perimeter security consisting of either:
 - A. perimeter breach detection or on-site motion detector capabilities; and
 - B. security guard(s) present 24 hours per day, seven days per week; or

- C. power plant personnel on site 24 hours per day, seven days per week; <u>or</u>
- D. continuous remote monitoring 24 hours per day, seven days per week, with local duty personnel on-call 24 hours per day, seven days per week, and capable of coordinating emergency response actions with emergency personnel and of arriving on-site within 30 minutes or less.

The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to those security plans. The CPM may authorize modifications to these measures, or may require additional measures such as protective barriers for critical power plant components—transformers, gas lines, and compressors—depending upon circumstances unique to the facility or in response to industry-related standards, security concerns, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Corporation, after consultation with both appropriate law enforcement agencies and the project owner.

Verification: At least 30 days prior to the initial receipt of hazardous materials on site, the project owner shall notify the CPM that a site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include signed statements similar to Attachments A and B that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan. In the annual compliance report, the project owner shall include a signed statement similar to Attachment C that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

HAZ-9: The project owner shall not allow any fuel gas pipe cleaning activities on site, either before placing the pipe into service or at any time during the lifetime of the facility, that involve "flammable gas blows" where natural (or flammable) gas is used to blow out debris from piping and then vented to atmosphere. Instead, an inherently safer method involving a non-flammable gas (e.g. air, nitrogen, steam) or mechanical pigging, shall be used as per the latest edition of NFPA 56, Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. A written procedure shall be developed and implemented as per NFPA 56, section 4.4.1.

<u>Verification:</u> At least 30 days before any fuel gas pipe cleaning activities begin, the project owner shall submit a copy of the Fuel Gas Pipe Cleaning Work Plan (as described in the 2014 NFPA 56, section 4.4.1) which shall indicate the method of

cleaning to be used, what gas will be used, the source of pressurization, and whether a mechanical PIG will be used, to the CBO for information and to the CPM for review and approval.

SAMPLE CERTIFICATION (Attachment A)

Affidavit of Compliance for Project Owners

١,

(Name of per	son signing	affidavit)	(Title)
(1101110 01 p01	oon orgining	aa.a	(1.1.0)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

(Company name)

for employment at

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above- named project.

(Signature of officer or agent)

Dated this ______day of _____, 20____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment B)

Affidavit of Compliance for Contractors

١,

(Name of per	son signing	affidavit)	(Title)
(1101110 01 p01	oon orgining	aa.a	(1.1.0)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

(Company name)

for contract work at

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above- named project.

(Signature of officer or agent)

Dated this ______ day of ______, 20_____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment C)

Affidavit of Compliance for Hazardous Materials Transport Vendors

١,

(Name of person signing affidavit) (Title)

do hereby certify that the below-named company has prepared and implemented security plans in conformity with 49 CFR 172.880 and has conducted employee background investigations in conformity with 49 CFR 172, subparts A and B,

(Company name)

for hazardous materials delivery to

(Project name and location)

as required by the California Energy Commission Decision for the abovenamed project.

(Signature of officer or agent)

Dated this ______ day of ______, 20_____.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

Appendix B Table 5.5-2. Chemical Inventory, Description of Hazardous Materials Stored Onsite, and Reportable Quantities

Trade Name	Chemical Name	CAS Number	Maximum Quantity Onsite (gallons, lbs, cu ft)	CERCLA SARA RQ ^a	RQ of Material as Used Onsite	EHS TPQ	Regulated Substance TQ	Prop 65
Aqueous ammonia NH3 (19 percent NH3 by weight)	Aqueous ammonia	7664-41-7	5,000 gallons ^g	100 lbs	526 lbs	500 lbs	500 lbs	No
Cleaning chemicals/detergents	Various	None	110 gallons	е	e	е	е	No
Hydraulic oil	Oil	None	190 gallons	42 gallons ^f	42 gallons ^f	е	е	No
Laboratory reagents	Various	Various	10 gallons	е	e	е	e	No
Synthetic lubricating oil	Oil	None	1,610 gallons	42 gallons ^f	42 gallons ^f	е	e	No
Mineral lubricating oil	Oil	None	3,000 gallons	42 gallons ^f	42 gallons ^f	е	е	No
Mineral insulating oil	Oil	8012-95-1	14,400 gallons	42 gallons ^f	42 gallons ^f	е	e	No
Sulfur hexafluoride	Sulfur hexafluoride	2551-62-4	45 lbs	e	е	е	e	No
Acetylene	Acetylene	47-86-2	600 cu ft	e	е	е	е	No
Oxygen	Oxygen	7782-44-7	600 cu ft	е	е	е	е	No
Propane	Propane	74-98-6	200 lbs	e	е	е	е	No
EPA Protocol gases	Various	Various	8,000 cu ft	е	е	е	е	No
Cleaning chemicals	Various	Various	Varies (less than 25 gallons liquids or 100 lbs solids for each chemical)	е	e	е	е	No

Trade Name	Chemical Name	CAS Number	Maximum Quantity Onsite (gallons, Ibs, cu ft)	CERCLA SARA RQ ^a	RQ of Material as Used Onsite	EHS TPQ	Regulated Substance TQ	Prop 65
Paint	Various	Various	Varies (less than 25 gallons liquids or 100 lbs solids for each type)	e	е	е	e	No
FM-200	FE-227	431-89-0	1,560 lbs	e	e	е	e	No
CO2	CO2	53569-62-3	24,500 cu ft	e	e	е	е	No
Lead-acid batteries (and/or nickel-cadmium batteries)	Lead-acid and/or nickel-cadmium batteries	Various	5,000 lbs	1,000	1,000	1,000	1,000	Yes
Lithium ion batteries	Lithium Ion Batteries	96-49-1 105-58-8	252 tons	е	е	е	е	No

^a RQs for a pure chemical, per the CERCLA SARA (Ref. 40 CFR 302, Table 302.4). Release equal to or greater than RQ must be reported. Under California law, any amount that has a realistic potential to adversely affect the environment or human health or safety must be reported.

^b RQ for materials as used onsite. Because some of the hazardous materials are mixtures that contain only a percentage of an RQ, the RQ of the mixture can be different than for a pure chemical. For example, if a material only contains 10 percent of a reportable chemical and the RQ is 100 lbs., the RQ for that material would be (100 lb)/(10 percent) = 1,000 lb.

^c EHS TPQ (Ref. 40 CFR Part 355, Appendix A). If quantities of extremely hazardous materials equal to or greater than the TPQ are handled or stored, they must be registered with the local Administering Agency.

^d TQ is from 19 CCR 2770.5 (state) or 40 CFR 68.130 (federal).

^e No reporting requirement. Chemical has no listed threshold under this requirement.

^f State Reporting Quantity (RQ) for oil spills that will reach California state waters (Ref. CA Water Code Section 13272(f)). 9 The NH3 tank capacity is 5,000 gallons; however, the tank is only filled to 85 percent of its capacity, or 4,250 gallons. Notes: CCR = California Code of Regulations

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act CFR = Code of Federal Regulations

- EHS = Extremely Hazardous Substance
- SARA = Superfund Amendments and Reauthorization Act
- TQ = Threshold Quantity

NOISE AND VIBRATION

PUBLIC NOTIFICATION PROCESS

NOISE-1 Prior to the start of ground disturbance, the project owner shall notify all residents within one mile of the project site and one-half mile of the linear facilities, by mail or by 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 a 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 where it is visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.

<u>Verification:</u> At least 15 days 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. This communication shall also verify that the telephone number has been established and posted at the site, and shall provide that telephone number.

NOISE COMPLAINT PROCESS

- **NOISE-2** Throughout the construction and the full term of operation, including facility closure, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints¹. The project owner or its authorized agent shall:
 - use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to the noise complaint;
 - attempt to contact the person(s) making the noise complaint within 24 hours;

¹ A project-related noise complaint is a complaint about noise that is caused by the Stanton project as opposed to another source, is documented by an individual or entity affected by such noise, and which may or may not constitute a violation by the project of any noise condition of certification.

- conduct an investigation to determine the source of noise in the complaint;
- if the noise is project related, take all feasible measures to reduce the source of the noise; and
- submit a report documenting the complaint and actions taken. The report shall include: a complaint summary, including the final results of noise reduction efforts and, if obtainable, a signed statement by the complainant that the noise problem has been resolved to the complainant's satisfaction.

<u>Verification:</u> Within five days of receiving a noise complaint, the project owner shall file with the CPM a Noise Complaint Resolution Form, shown below, that documents the resolution of the complaint. If mitigation is required to resolve the complaint, and the complaint is not resolved within a three business-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented.

EMPLOYEE NOISE CONTROL PROGRAM

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 (above permissible) noise levels during construction in accordance with Title 8, California Code of Regulations, Sections 5095-5099, and Title 29, Code of Federal Regulations, Section 1910.95.

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

OPERATIONAL NOISE RESTRICTIONS AND SURVEY

NOISE-4 The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the noise levels due to the project operation alone do not exceed an hourly average exterior noise level of 49 dBA measured at monitoring location LT1 and 43 dBA measured at monitoring location LT2.

No new pure-tone components, as defined below, shall be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws project-related complaints.

Definition of a pure-tone component: A pure tone is defined as existing if the one-third octave band sound pressure level in the band with the tone exceeds the arithmetic average of the two contiguous bands by 5 decibels (dB) for center frequencies of 500 Hz and above, or by 8 dB for center frequencies between 160 Hz and 400 Hz, or by 15 dB for center frequencies less than or equal to 125 Hz.

After commissioning and installation of the noise attenuation measures and when the project first achieves a sustained output of 85 percent or greater of its rated capacity, the project owner shall conduct a 25-hour community noise survey at monitoring locations LT1 and LT2 or at an alternative location acceptable to the CPM and include L_{eq} and L₉₀ readings. This survey shall also include measurement of one-third octave band sound pressure levels to ensure that no new pure-tone noise components have been caused by the project.

The measurement of power plant noise for the purpose of demonstrating compliance with this condition of certification may alternatively be made at a location other than LT1 and LT2, acceptable to the CPM, and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected residence. The character of the plant noise shall be evaluated at the affected receptor locations to determine the presence of pure tones or other dominant sources of plant noise.

If the results from the noise survey indicate that the power plant noise exceeds the above values at the above monitoring locations, mitigation measures shall be implemented to reduce noise to a level of compliance with these limits.

If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to reduce the pure tones to a level that does not exceed the pure tone requirements as defined above.

Verification: The above noise survey shall take place within 30 days of the project first achieving a sustained output of 85 percent or greater of its rated capacity and after commissioning and installation of the noise attenuation measures.

Within 15 days after completing the survey, the project owner shall submit a summary report to the CPM. Included in the survey report shall 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 implemented and 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.

OCCUPATIONAL NOISE SURVEY

NOISE-5 Following commissioning and installation of the noise attenuation measures and the project's attainment of a sustained output of 85 percent or greater of its rated capacity, the project owner shall conduct an occupational noise survey to identify any noise hazardous areas within the power plant.

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 to be employed in order to comply with the above regulations.

<u>Verification:</u> Within 30 days after completing each 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 from OSHA and Cal-OSHA.

CONSTRUCTION NOISE RESTRICTIONS

- **NOISE-6** Heavy equipment operation and noisy² work associated with the construction work relating to any project features onsite, including pile driving, shall be restricted to the times delineated below:
 - Mondays through Saturday: 7:00 a.m. to 8:00 p.m.

Heavy equipment operation and noisy work associated with the construction work relating to installation of linear facilities shall be restricted to the times delineated below:

² Noise that draws a project-related complaint. For definition of a "project-related complaint", see the footnote in Condition of Certification **NOISE-2**.

Work within the cities of Stanton and Buena Park:

• Monday through Saturday: 7:00 a.m. to 8:00 p.m.

Activities taking place within a 500-foot radius of a residential area within the city of Anaheim:

• Monday through Saturday: 7:00 a.m. to 7:00 p.m.

Construction work shall be performed in a manner to ensure excessive noise (noise that draws a project-related complaint) is prohibited and the potential for noise complaints is reduced as much as practicable. Haul trucks and other engine-powered equipment shall be equipped with adequate mufflers and other state-required noise attenuation devices. Haul trucks shall be operated in accordance with posted speed limits. Truck engine exhaust brake use (jake braking) shall be limited to emergencies.

<u>Verification:</u> 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 work associated with this project.

Construction equipment generating excessive noise shall be updated or replaced. Temporary acoustic barriers shall be installed around stationary construction noise sources if beneficial in reducing the noise. The project owner shall reorient construction equipment, and relocate construction staging areas, when possible, to minimize the noise impact to nearest noise-sensitive receptors.

PILE DRIVING MANAGEMENT

NOISE-7 The project owner shall perform impact sheet-pile driving in a manner to reduce the potential for any project-related noise and vibration complaints. The project owner shall notify the residents in the vicinity of impact sheet-pile driving prior to start of impact sheet-pile driving activities.

<u>Verification:</u> At least 15 days prior to first impact sheet-pile driving, the project owner shall submit to the CPM a description of the pile driving technique to be employed, including calculations showing its projected noise impacts at monitoring location LT1.

At least 10 days prior to first impact sheet-pile driving, the project owner shall notify the residents within one mile of the pile driving. In this notification, the project owner shall state that it will perform this activity in a manner to reduce the potential for any project-

related noise and vibration complaints as much as practicable. The project owner shall submit a copy of this notification to the CPM prior to the start of pile driving.

NOISE COMPLAINT RESOLUTION FORM

Stanton Energy Reliability	Center
NOISE COMPLAINT LOG NUMBER	
Complainant's name and address:	
Phone number:	
Date complaint received:	
Nature of noise complaint:	
Definition of problem after investigation by plant perso	onnel:
Date complainant first contacted:	
Initial noise levels at 3 feet from noise source	dBA Date:
Initial noise levels at complainant's property:	dBA Date:
Final noise levels at 3 feet from noise source:	dBA_Date:
Final noise levels at complainant's property:	dBA Date:
Description of corrective measures taken:	
Complainant's signature:	Date:
Approximate installed cost of corrective measures: \$ _ Date installation completed: Date first letter sent to complainant: Date final letter sent to complainant:	(copy attached) (copy attached)
This information is certified to be correct:	
Plant Manager's Signature: (Attach additional pages and supporting documentation, as required	

SOCIOECONOMICS

SOCIO-1 The project owner shall pay the current one-time statutory school facility development fee to the Magnolia Elementary School District and to the Anaheim Union High School District as authorized by Education Code Section 17620 and the Magnolia Elementary School District Board Policy BP 7211 Facilities: Developer Fees.

<u>Verification:</u> At least 30 days prior to the start of project construction, the project owner shall provide to the compliance project manager (CPM) proof that the delegate chief building official (DCBO) has calculated the assessable covered and enclosed space consistent with local practices and shall provide proof of payment of the development fees, based on the calculated space and current school development fees, to the Magnolia Elementary School District and to the Anaheim Union High School District.

SOIL AND WATER RESOURCES

NPDES CONSTRUCTION PERMIT REQUIREMENTS

SOIL&WATER-1 The project owner shall manage storm water pollution from project construction activities by fulfilling the requirements contained in State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002) and all subsequent revisions and amendments. The project owner shall develop and implement a construction Storm Water Pollution Prevention Plan (SWPPP) for the construction of the project.

<u>Verification:</u> At least thirty (30) days prior to site mobilization, the project owner shall submit to the CPM proof that the construction permit was granted and that a waste discharge identification number (WDID) was issued by the State Water Resources Control Board (SWRCB). Within ten (10) days of its mailing or receipt, the project owner shall submit to the CPM any correspondence between the project owner and the SWRCB or the Santa Ana Regional Water Quality Control Board (SARWQCB) about the general NPDES permit for discharge of storm water associated with this activity. This information shall include the notice of intent, the notice of termination, and any updates to the construction SWPPP.

STORM WATER MANAGEMENT PLAN

SOIL&WATER-2 The project owner shall comply with the Orange County Model Water Quality Management Plan (WQMP) requirements in accordance with Title 4, Division 13 and Title 9, Division 1, of the Orange County Code. The project owner shall provide a WQMP for post-construction storm water BMPs to Orange County for review and the CPM for review and approval. The project owner shall also pay necessary fees for compliance with the WQMP provisions of the Orange County Code. The project owner shall notify the CPM in writing of any reported non-compliance with the county requirements, including documentation of any measures taken to correct the noncompliance, and the results of those corrective measures. It is the Energy Commission's intent that these requirements be enforceable by both the Energy Commission and Orange County. Accordingly, the Commission and Orange County shall confer with each other and coordinate, as needed, in enforcement of the requirements. <u>Verification:</u> At least 120 days prior to site grading, the project owner shall provide a WQMP for post-construction storm water BMPs to the CPM and to the Orange County Public Works Department. At least thirty days prior to Stanton grading activities, the project owner shall submit to the CPM verification of the county's completed review of the WQMP or a copy of correspondence indicating they will not be reviewing the submittal. Within ten (10) days of its mailing or receipt, the project owner shall submit to the CPM all copies of any relevant correspondence between the project owner and the county regarding storm water management.

HYDROSTATIC AND DEWATERING WATER DISCHARGE PERMIT REQUIREMENTS

SOIL&WATER-3 Prior to initiation of discharge to surface water from hydrostatic testing water or groundwater from dewatering, the project owner shall obtain a National Pollutant Discharge Elimination System permit for discharge when applicable. The project owner shall comply with the requirements of the NPDES Permit Order No. CAG998001 for hydrostatic testing and dewatering (if applicable) water discharge. The project owner shall provide a copy of all permit documentation sent to the Santa Ana Regional Water Quality Control Board (SARWQCB) or State Water Resources Control Board (SWRCB) to the CPM and notify the CPM in writing of any reported non-compliance.

Verification: At least thirty (30) days prior to the first scheduled hydrostatic testing event or discharge of groundwater dewatering water, the project owner shall submit to the CPM documentation that all necessary NPDES permits were obtained from the SARWQCB or SWRCB. At least thirty days (30) prior to project construction, the project owner shall submit to the CPM a copy of the relevant plans and permits received. The project owner shall submit to the CPM all copies of any relevant correspondence between the project owner and the SWRCB regarding NPDES permits in the annual compliance report.

WATER USE AND REPORTING

SOIL&WATER-4 Water supply for project construction and operation shall be potable water supplied by Golden State Water Company. Project water use for construction shall not exceed 5.6 acre-feet. Project operation water use shall not exceed 34 AFY. The project owner shall record daily water use for the project's construction and operation. The project owner shall comply with the water use limits and reporting requirements described below. <u>Verification:</u> During project construction, the monthly compliance report shall include a summary of monthly water use. After construction is complete, the project's annual compliance report shall include a monthly and annual summary of water use.

WATER METERING

SOIL&WATER-5 The project owner shall comply with and pay all necessary fees for connection to Golden State Water Company supply system. Prior to the use of water during commercial operation, the project owner shall install and maintain metering devices as part of the water supply and distribution system to monitor and record in gallons per day the total volume(s) of water supplied from Golden State Water Company. Those metering devices shall be operational for the life of the project.

<u>Verification</u>: At least thirty (30) days prior to use of the Golden State Water Company potable water supply, the project owner shall submit to the CPM evidence that they have complied with all requirements and paid the necessary fees for connection. At least thirty (30) days prior to use of water, the project owner shall also provide evidence that metering devices have been installed and are operational. The project owner shall provide a report on the servicing, testing, and calibration of the metering devices in the annual compliance report. Fees paid to Golden State Water Company shall be reported in the Annual Compliance Report (ACR) for the life of the project.

SEWER CONNECTIONS

SOIL&WATER-6 The project owner shall comply with and pay the city of Stanton all fees normally associated with connections to the city's sanitary sewer system for process and sanitary wastewater as defined in the city's code, Title 14 Water and Sewers.

<u>Verification:</u> Prior to the use of the city's sewer system the project owner shall provide the CPM documentation indicating that the city has accepted the project's connections to the sewer system. Fees paid to the city shall be reported in the Annual Compliance Report (ACR) for the life of the project. The ACR shall also include a monthly and annual summary of wastewater discharge.

FRAC-OUT PLAN FOR NATURAL GAS LINE CONSTRUCTION

SOIL&WATER-7 Prior to the initiation of any Carbon Creek jack and bore activities for the natural gas pipeline, the project owner shall apply for coverage under the following permits:

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- A. Section 401 water quality certification or a waiver of waste discharge requirements from the Santa Ana Regional Water Control Board or the State Water Resources Control Board;
- B. Section 404 acceptance of preconstruction notification for nationwide permit(s) from the US Army Corps of Engineers;
- C. Section 408 permit from the US Army Corps of Engineers; and
- D. Streambed Alteration Agreement(s), developed in consultation with the California Department of Fish and Wildlife.

Modifications of the construction techniques to be used or the location of the crossing that are made as a result of permit conditions shall be reviewed by the CPM. The project owner shall implement the terms and conditions contained in all permits.

<u>Verification:</u> At least thirty (30) days prior to any construction-related activities that could affect water quality in Carbon Creek, the project owner shall provide the CPM with copies of the applicable permits or agreements.

BRIDGES ENCROACHMENT PERMIT

SOIL&WATER-8 The project owner shall obtain an encroachment permit for the construction of the vehicle and utility bridges from the Orange County Public Works Department in accordance with Orange County Code – Title 9, Division 2, Article 2, Sections 9-2-40 and 9-2-50. The project owner shall pay all necessary fees to Orange County Public Works Department for compliance with the permit review and approval process. The project owner shall submit the encroachment permit application package to Orange County Public Works Department and the CPM for review and approval prior to bridge construction. The project owner shall also provide a copy of the approved permit to the CPM.

<u>Verification:</u> At least ninety (90) days prior to bridge construction, the project owner shall provide a copy of the application package for the encroachment permit and any comments from Orange County Public Works Department to the CPM for review and approval. At least thirty (30) days prior to bridge construction, the project owner shall submit a copy of the final approved permit from Orange County Public Works Department to the CPM for review and approved permit from Orange County Public Works

TRAFFIC AND TRANSPORTATION

TRANS-1 ROADWAY USE PERMITS AND REGULATIONS

The project owner shall comply with limitations imposed by the Department of Transportation (Caltrans) and other relevant jurisdictions, including the cities of Stanton, Anaheim, Buena Park, Garden Grove, and Westminster, and the county of Orange, on vehicle sizes and weights, driver licensing, and truck routes.

<u>Verification:</u> In the Monthly Compliance Reports (MCRs), the project owner shall identify the permits received during that reporting period (copies of actual permits are not required in the MCR) to demonstrate project compliance with limitations of relevant jurisdictions for vehicle sizes, weights, driver licensing, and truck routes. The project owner shall retain copies of permits and supporting documentation on-site for compliance project manager (CPM) inspection if requested.

TRANS-2 TRAFFIC CONTROL PLAN

Prior to the start of construction, the project owner shall prepare a Traffic Control Plan (TCP) for the project's construction traffic. The TCP shall address the movement of workers, vehicles, and materials, including arrival and departure schedules and designated workforce and delivery routes.

The project owner shall consult with the city of Stanton in the preparation and implementation of the TCP. The project owner shall submit the proposed TCP to the city in sufficient time for review and comment, and to the CPM for review and approval prior to the proposed start of construction and implementation of the plan.

The TCP shall include:

- Routes used for construction-related trips for workers, deliveries, and heavy haul trucks, with heavy haul trucks using truck routes wherever possible;
- Any alternate routes used for non-bulk hazardous materials delivery, including the Beach Boulevard to Cerritos Avenue to Fern Avenue route that would allow the project owner to make deliveries more easily to the rear of the project site;

- Parking/Staging Plan (PSP) for project construction and operation. The PSP must comply with the city of Stanton's parking regulations;
- Placement of necessary signage, lighting, and traffic control devices at the project construction site, including locations of linear facilities construction, and the worker parking site;
- Means of access for emergency vehicles to the project site;
- Location and details of construction along affected roadways at night where permitted;
- Means of maintaining access to adjacent residential and commercial property during the construction of linear facilities in or near the right-ofway;
- Details regarding temporary closure of travel lanes or disruptions to street segments and intersections during construction activities;
- Plan for advance notification to residents, businesses, emergency providers, and hospitals that would be affected when roads may be partially or completely closed.

<u>Verification:</u> At least 60 calendar days prior to the start of construction, the project owner shall submit the TCP to the city of Stanton for review and comment and to the CPM for review and approval. The project owner shall also provide the CPM with a copy of the transmittal letter to the city of Stanton requesting review and comment.

At least 30 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters received from the city of Stanton or any other interested agencies, along with any changes to the TCP, for CPM review and approval. After CPM review and approval, the project owner shall provide completed copies of the final TCP to the city of Stanton and any other interested agencies, sending copies of the correspondence to the CPM.

TRANS-3 RESTORATION OF ALL PUBLIC ROADS, EASEMENTS, AND RIGHTS-OF-WAY

The project owner shall restore all public roads, easements, rights-of-way, and any other transportation infrastructure damaged due to project-related construction and traffic. Restoration shall be completed in a timely manner to the infrastructure's original condition. Restoration of significant damage which could cause hazards (such as potholes, deterioration of pavement edges, or damaged signage) shall take place immediately after the damage has occurred.

Prior to the start of site mobilization, the project owner shall notify the relevant agencies, including the city of Stanton, county of Orange, Caltrans District 12, and any jurisdictions affected by construction of the linear facilities, of the proposed schedule for project construction. The purpose of this notification is to request that these agencies consider postponement of any planned public right-of-way repairs or improvement activities in areas affected by project construction until construction is completed, and to coordinate any concurrent activities that cannot be postponed.

<u>Verification:</u> Prior to the start of site mobilization, the project owner shall videotape roads and intersections along the major routes construction vehicles would take in the vicinity of the project site. The project owner shall provide the videotapes or other recorded visual media to the CPM.

If damage to any public road, easement, or right-of-way occurs during construction, the project owner shall notify the CPM and the affected agency/agencies to identify the sections to be repaired. At that time, the project owner and CPM shall establish a schedule for completion of the repairs with which the project owner must comply, unless approval for a schedule change is provided by the CPM. Following completion of any repairs, the project owner shall provide the CPM with letters signed by the affected agency/agencies stating their satisfaction with the repairs.

TRANS-4 ENCROACHMENT INTO PUBLIC RIGHTS-OF-WAY

Prior to any ground disturbance, improvements, or obstruction of traffic within any public road, easement, or right-of-way, the project owner shall coordinate with all applicable jurisdictions, including the city of Stanton, to obtain necessary encroachment permits and comply with all applicable regulations, including applicable road standards.

<u>Verification:</u> At least 10 days prior to ground disturbance, improvements, or interruption of traffic in or along any public road, easement, or right-of-way, the project owner shall provide copies to the CPM of all permits received from any affected jurisdictions. In addition, the project owner shall retain copies of the issued permits and supporting documentation in its compliance file for a minimum of 180 calendar days after the start of commercial operation.

TRANS-5 TRANSPORTATION OF HAZARDOUS MATERIALS

The project owner shall contract with licensed hazardous materials delivery and waste hauler companies for the transportation of hazardous materials and wastes. The project owner shall ensure compliance with all applicable regulations and implementation of the proper procedures.

<u>Verification:</u> In the MCRs during construction and the Annual Reports during operation, the owner shall provide the names of the contracted hazardous materials delivery and waste hauler companies used, as well as licensing verification. Licensing verification only needs to be included in the MCRs when a new company is used. If a company's licensing verification has already been submitted in an MCR, it is not necessary to submit it again. Licensing verification must be included in all Annual Reports, even if the company has already been used.

TRANS-6 RAIL CROSSING SAFETY PLAN

Prior to any construction-related ground disturbance, the project owner shall develop and implement a rail crossing safety plan for construction that addresses construction-related pedestrian activity (including workers walking between the parking area and the site or working at the site), construction vehicles, and heavy/oversize loads.

<u>Verification:</u> At least 60 calendar days prior to the start of construction-related ground disturbance, the project owner shall submit the rail crossing safety plan to the city of Stanton and Union Pacific Railroad (UPRR) for review and comment and to the CPM for review and approval. The project owner shall also provide the CPM with a copy of the transmittal letters to the city of Stanton and UPRR requesting review and comment.

At least 30 calendar days prior to the start of construction-related ground disturbance, the project owner shall provide copies of any comment letters received from the city of Stanton and UPRR, along with any changes to the rail crossing safety plan, for CPM review and approval. After CPM review and approval, the project owner shall provide completed copies of the final rail crossing safety plan to the city of Stanton and UPRR, sending copies of the correspondence to the CPM.

TRANS-7 FAA NOTIFICATION FOR CONSTRUCTION EQUIPMENT AT OR EXCEEDING 153 FEET AGL

The project owner or its contractor(s) shall file Federal Aviation Administration (FAA) Form 7460-1, Notice of Proposed Construction or Alteration, with the

FAA for any construction equipment 153 feet above ground level (AGL) or taller. The project owner shall comply with any conditions imposed by the FAA as part of their hazard determination, such as marking and lighting requirements.

<u>Verification:</u> At least 30 days prior to the presence onsite of any construction equipment 153 feet AGL or taller, the project owner shall submit to the CPM a copy of the FAA's hazard determination.

TRANS-8 PILOT NOTIFICATION AND AWARENESS.

The project owner shall initiate the following actions to ensure pilots are aware of the project location and potential hazards to aviation:

- Submit a letter to the FAA requesting a Notice to Airmen (NOTAM) be issued advising pilots of the location of the power plant and recommending avoidance of overflight. The letter shall also request that the NOTAM be maintained in active status until the applicable navigational charts and Chart Supplements (formerly called the Airport Facility Directory) have been updated.
- 2. Submit a letter to the FAA requesting a power plant depiction symbol be placed at the power plant site location on the Los Angeles Sectional Chart with a notice to avoid overflight.
- 3. Submit a request to the Los Alamitos Army Airfield (LAAA) Manager and Fullerton Municipal Airport (FMA) Manager to add new remarks to the Automatic Terminal Information Service (ATIS) and to the Chart Supplements for LAAA and FMA. The remarks shall identify the location of the power plant and advise pilots to avoid direct overflight as they approach or depart the airports.

Verification: Within 60 days following the start of construction, the project owner shall submit to the CPM for review and approval draft language for the letters of request to the FAA, the LAAA Manager, and the FMA Manager. The letters should request a response within 30 days that includes a timeline for implementing the required actions.

Within 60 days after CPM approval of the draft language, the project owner shall submit the required letters of request to the FAA, the LAAA Manager, and the FMA Manager. The project owner shall submit copies of these requests to the CPM. A copy of any resulting correspondence shall be submitted to the CPM within 10 days of receipt. If the FAA, the LAAA Manager, or the FMA Manager does not respond within 30 days, the project owner shall contact the CPM.

TRANSMISSION LINE SAFETY AND NUISANCE

TLSN-1 The project owner shall construct the proposed 66-kV underground transmission line according to the requirements of California Public Utility Commission's GO-128, GO-52, GO-131-D, Title 8, and Group 2, High Voltage Electrical Safety Orders, sections 2700 through 2974 of the California Code of Regulations, and Southern California Edison's EMF reduction guidelines.

<u>Verification:</u> At least 30 days prior to start of construction of the transmission line or related structures and facilities, the project owner shall submit to the compliance project manager (CPM) a letter signed by a California registered electrical engineer affirming that the line will be constructed according to the requirements stated in the condition.

TLSN-2 The project owner shall ensure that all permanent metallic objects within the proposed route are grounded according to industry standards.

<u>Verification:</u> At least 30 days before the line is energized, the project owner shall submit to the compliance project manager (CPM) a letter signed by a California registered electrical engineer affirming compliance with this condition.

SURFACE TREATMENT OF PROJECT STRUCTURES

VIS-1 The project owner shall treat the surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the landscape; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be nonspecular and non-reflective, and the insulators shall be non-reflective and non-refractive.

Surface color treatment shall include painting and finish of the gas turbine facility enclosures and all other visible major power plant features, as well as all transmission line monopoles, in the colors and finishes outlined in Table 5.13-2 of the Stanton project Application for Certification (SERC 2016a). The project owner shall submit for CPM review and approval, a specific surface treatment plan that would satisfy these requirements. The treatment plan shall include:

- 1. A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes;
- 2. A list of each major project structure, building, tank, pipe, and wall; the transmission line structures; and fencing, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system;
- 3. One set of color brochures or color chips showing each proposed color and finish;
- 4. One set of 11" x 17" color photo simulations at life-size scale when the picture is held 10 inches from the viewer's eyes, of the treatment proposed for use on project structures, including structures treated during manufacture, from Key Observation Points (KOP) 1 and 2
- 5. A specific schedule for completion of the treatment; and
- 6. A procedure to ensure proper treatment maintenance for the life of the project.

<u>Protocol</u>: 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 in the field, until the project owner receives notification of approval of the treatment plan by the CPM. Subsequent modifications to the treatment plan are prohibited without CPM approval.

<u>Verification:</u> At least 90 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture, the project owner shall submit the proposed treatment plan to the CPM for review and approval and simultaneously to the city of Stanton for review and comment.

If the CPM determines that the plan requires revision, the project owner shall provide to the CPM a plan with the specified revision(s) for review and approval by the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to the CPM for review and approval.

Prior to the start of commercial operation, the project owner shall notify the CPM that surface treatment of all listed structures and buildings has been completed and is ready for inspection and shall submit one set of electronic color photographs from the same key observation points identified in (d) above.

The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify a): the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.

SCREENING LANDSCAPE PLAN

VIS-2 The project owner shall also submit to the CPM for review and approval, and simultaneously to the city of Stanton for review and comment, a detailed landscape plan and irrigation plan for the power plant site in fulfillment of requirements of applicable laws, ordinances, regulations, and standards, including water efficiency irrigation standards as required by the city of Stanton.

<u>Protocol</u>: The plans shall provide a detailed installation schedule demonstrating installation of as much of the landscaping as early in the construction process as is feasible in coordination with project construction.

A list (prepared by a qualified professional arborist familiar with local growing conditions) of proposed species, specifying installation sizes, growth rates, suitable native and non-invasive plant species, and local availability of proposed species. expected time to maturity, expected size at five years and at maturity, spacing, number, availability, and a discussion of the suitability of the plants for the site conditions and mitigation objectives, with the objective of providing the widest possible range of species from which to choose;

Maintenance procedures, including a plan for routine annual or semi-annual debris removal for the life of the project, if applicable;

The plans shall demonstrate compliance with applicable city of Stanton irrigation requirements;

A procedure for monitoring for, and replacement of, unsuccessful plantings for the life of the project; and

Digital photo-simulations of the proposed landscaping at five years and 20 years after planting, as viewed from the foreground of Dale Road (KOP 1) of the right-of-way; and of the power plant site viewed from Pacific Street (KOP 3).

The plan shall not be implemented until the project owner receives final approval from the CPM.

Verification: The landscaping plans and irrigation plans shall be developed and submitted at the earliest feasible time during or prior to construction. The landscaping plans and irrigation plans shall be submitted to the CPM for review and approval and simultaneously to the city of Stanton for review and comment at least 90 days prior to installation.

If the CPM determines that the plans require revision, the project owner shall provide to the CPM and simultaneously to the city of Stanton a revised plan for review and approval by the CPM.

The planting must occur during the first optimal planting season following completion of site construction. The project owner shall simultaneously notify the CPM and the city of Stanton within seven days after completing installation of the landscaping, that the landscaping is ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead or dying vegetation, for the previous year of operation in each Annual Compliance Report. The CPM shall have authority to require replacement planting of dead or dying vegetation through the life of the project.

SITE LIGHTING – PROJECT CONSTRUCTION AND COMMISSIONING

- VIS-3 Consistent with applicable worker safety regulations, the project owner shall ensure that lighting of on-site construction areas, and construction worker parking lots, minimizes potential night lighting impacts by implementing the following measures:
 - A. All fixed-position lighting shall be hooded and shielded to direct light downward and toward the construction area to be illuminated to prevent illumination of the night sky and minimize light trespass (i.e., direct light extending beyond the boundaries of the parking lots and construction sites, including any security-related boundaries).
 - B. Lighting of any tall construction equipment (e.g., scaffolding, derrick cranes, etc.) shall be directed toward areas requiring illumination and shielded to the maximum extent practicable.
 - C. Task-specific lighting shall be used to the maximum extent practicable.
 - D. Wherever and whenever feasible, lighting shall be kept off when not in use and motion sensors shall be installed and used to the maximum extent practicable.
 - E. The CPM shall be notified of any construction-related lighting complaints. Complaints shall be documented using a form in the format shown in Attachment 1, and completed forms shall record resolution of each complaint. A copy of each completed complaint form shall be provided to the CPM. Records of lighting complaints shall also be kept in the compliance file at the project site.

Verification: Within seven calendar days after the first use of construction lighting, the project owner shall notify the CPM that the lighting is ready for inspection. If the CPM determines that modifications to the lighting are needed for any construction milestone, within 14 calendar days of receiving that notification, the project owner shall correct the lighting and notify the CPM that modifications have been completed. Within 48 hours of receiving a lighting complaint for any construction activity, the project owner shall provide to the CPM a copy of the complaint report and resolution form, including a schedule for implementing corrective measures to resolve the complaint. The project owner shall report any lighting complaints and document their resolution in the monthly

compliance report for the project, accompanied by copies of completed complaint report and resolution forms for that month.

LIGHTING MANAGEMENT PLAN – PROJECT OPERATION

VIS-4 The project owner shall prepare and implement a comprehensive Lighting Management Plan. The comprehensive Lighting Management Plan shall be submitted to the CPM, and the Planning Director of the city of Stanton for simultaneous review and comment. Any comments on the plan from the city shall be provided to the CPM. The project owner shall not purchase or order any lighting fixtures or apparatus until written approval of the final plan is received from the CPM. Modifications to the Lighting Management Plan are prohibited without the CPM's approval.

Consistent with applicable worker safety regulations, the project owner shall design, install, and maintain all permanent exterior lighting such that light sources are not directly visible from areas beyond the project site, glare is avoided, and night lighting impacts are minimized or avoided to the maximum extent feasible. All lighting fixtures shall be selected to achieve high energy efficiency for the facility.

- 1) The Lighting Management Plan shall meet the following requirements:
 - A. The Lighting Management Plan shall include three printed sets of full size plans (24" x 36", minimum), three sets of 11" x 17" reductions,
 - B. A digital copy in PDF format.
 - C. The Lighting Management Plan shall be prepared with the direct involvement of a certified lighting professional trained to integrate efficient technologies and designs into lighting systems.
- 2) The project owner shall meet, and the Lighting Management Plan shall demonstrate, the following requirements for permanent lighting:
 - A. Exterior lights shall be hooded and shielded and directed downward or toward the area to be illuminated to prevent obtrusive spill light (i.e., light trespass) beyond the project site.
 - B. Exterior lighting shall be designed to minimize backscatter to the night sky to the maximum extent feasible.

- C. Exterior lighting shall utilize fully-shielded luminaires, and conform generally to International Dark-Sky Association recommendations for lighting zone LZ1.
- D. Energy efficient lighting products and systems shall be used for all permanent new lighting installations. Smart bi-level exterior lighting using high efficiency directional LED fixtures shall be used as appropriate for exterior installations. The lighting system shall work in conjunction with occupancy sensors, photo sensors, wireless controls, and/or other scheduling or controls technologies to provide adequate light for security and maximize energy savings.
- E. Lighting fixtures shall be kept in good working order and continuously maintained according to the original design standards.
- F. Lighting shall be consistent with all applicable laws, ordinances, regulations, and standards.
- G. The CPM shall be notified of any complaints about permanent lighting at the project site. Complaints shall be documented using the Lighting Complaint Resolution Form shown in **Attachment-1**, and completed forms shall record resolution of each complaint. A copy of each completed complaint form shall be provided to the CPM. Records of lighting complaints shall also be kept in the compliance file at the project site.

<u>Verification:</u> At least 90 calendar days before ordering any permanent lighting equipment for the project, the project owner shall submit the comprehensive Lighting Management Plan simultaneously to the Planning Director of the city of Stanton for review and comment and the CPM for review and approval. The project owner shall provide the CPM with a copy of the transmittal letters submitted to the city requesting their review of the Lighting Management Plan. The CPM shall deem the Lighting Management Plan acceptable to the city of Stanton if comments are not provided to the CPM within 45 calendar days of receipt of said plan.

If the CPM determines that the plan requires revision, the project owner shall provide a plan with the specified revision(s) for review and approval by the CPM. A courtesy copy of the revised plan shall be provided to the Planning Director of the city of Stanton for review and comment and the CPM from review and approval. No work to implement the plan (e.g., purchasing of fixtures) shall begin until final plan approval is received from the CPM.

Prior to the start of commercial operation of the project, the project owner shall notify the CPM that installation of permanent lighting for the project has been completed and that the lighting is ready for inspection. If the CPM notifies the project owner that modifications to the lighting system are required, within 30 days of receiving that notification, the project owner shall implement all specified changes and notify the CPM that the modified lighting system(s) is ready for inspection.

Within 48 hours of receiving a complaint about permanent project lighting, the project owner shall provide to the CPM a copy of the complaint report and resolution form, including a schedule for implementing corrective measures to resolve the complaint.

The project owner shall report any complaints about permanent lighting and document their resolution in the Annual Compliance Report for the project, accompanied by copies of completed complaint report and resolution forms for that year. The project owner shall not order any exterior lighting until receiving CPM approval of the lighting mitigation plan.

Prior to commercial operation, the project owner shall notify the CPM that installation of the lighting has been completed and is ready for inspection. If after inspection the CPM notifies the project owner that modifications to the lighting are needed, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed and are ready for inspection.

Lighting Complaint Resolution Form		
Facility Name: Stanton Energy Reliability Center Complaint Log No:		
Complainant's name and address: Phone No:		
Complainant's Email address:		
Date and time complaint received:		
Complaint filed: By Telephone In Writing (attach letter) In Person		
Date of first occurrence:		
Description of the complaint (lighting, duration, etc.):		
Findings of investigation by SERC personnel:		
Indicate if complaint relates to a violation of an Energy Commission condition: \Box Yes \Box No		
Date complainant contacted to discuss findings:		
Description of corrective measures taken or other complaint resolution:		
Indicate if complainant agrees with proposed resolution:		
In not, explain:		
Additional relevant information:		
If corrective action necessary, date completed:		
Date of first response to complainant: (attach copy)		
Date of final response to complainant: (attach copy)		
This information is certified to be correct:		
Plant or project manager's signature: Date:		

WASTE MANAGEMENT

- **WASTE-1** The project owner shall prepare and submit to the compliance project manager (CPM) a Soils Management Plan (SMP) prior to any earthwork. The SMP shall be prepared by a California Registered Geologist or a California Registered Civil Engineer with sufficient experience in hazardous waste management. The SMP shall be updated as needed to reflect changes in laws, regulations or site conditions. All earthwork at the site shall be conducted in accordance with the SMP. Where actions are required in accordance with the SMP, an SMP summary report, which includes all analytical data and other findings, shall be submitted once the earthwork has been completed. Topics covered by the SMP shall include, but not be limited to:
 - 1. Land use history including description and locations of any known contamination.
 - 2. The nature and extent of any previous investigations and remediation at the site.
 - 3. The nature and extent of any unremediated contamination at the proposed site.
 - 4. A listing and description of institutional controls such as the county's excavation ordinance and other local, state, and federal regulations and laws that would apply to the project.
 - 5. Names and positions of individuals involved with soils management and their specific roles.
 - 6. An earthwork schedule.
 - 7. A description of protocols for the investigation and evaluation of any previously unidentified contamination that may be encountered in time. The protocol shall be for temporary and permanent controls that may be required to reduce exposure to on-site workers, visitors, and the public.
 - 8. A site-specific Health and Safety Plan (HSP) to be implemented by all contractors at the site. The HSP shall be prepared by a Certified Industrial Hygienist and would protect on-site workers by including engineering controls, personal protective equipment, monitoring, and security to prevent unauthorized entry and to reduce construction related hazards.

The HSP shall address the possibility of encountering subsurface chemical contamination and include procedures to protect workers and the public.

- 9. Hazardous waste determination and disposal procedures for known and previously unidentified contamination.
- 10. Requirements for site-specific techniques at the site to minimize dust, manage stockpiles, run-on and run-off controls, waste disposal procedures, etc.
- 11. Copies of relevant permits or closures from regulatory agencies.

Verification: At least 45 days prior to any earthwork, the project owner shall submit the SMP to the CPM for review and approval. An SMP summary shall be submitted to the CPM within 25 days of completion of any earthwork.

WASTE-2 The project owner shall provide the resume of an experienced and qualified professional engineer or professional geologist, who shall be available for consultation during site characterization (if needed), demolition, excavation, and grading activities, to the CPM for review and approval. The resume shall reflect experience in remedial investigation and feasibility studies.

The professional engineer or professional geologist shall be given full authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil.

<u>Verification</u>: At least 30 days prior to the start of site mobilization, the project owner shall submit the resume to the CPM for review and approval.

WASTE-3 If seemingly contaminated soil is identified during site characterization, demolition, excavation, or grading at either the proposed site or linear facilities (as evidenced by discoloration, odor, detection by handheld instruments, or other signs), the professional engineer or geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and provide a written report to the project owner, representatives of Department of Toxic Substances Control, and the CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the professional engineer or professional 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 professional engineer or professional geologist, significant remediation may be required, the project owner shall contact the CPM and representatives of the Department of Toxic Substances Control for guidance and possible oversight.

<u>Verification:</u> The project owner shall submit any final reports filed by the professional engineer or professional geologist to the CPM within five days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

- WASTE-4 The project owner shall prepare a Construction and Demolition (C & D) Environmental Resources Management and Recycling Plan for demolition and construction wastes generated and shall submit a copy of the plan to the Orange County's Public Works/Planning Department for review, and to the CPM for review and approval. The plan shall include at a minimum, the following information:
 - 1. a description of all construction waste streams, including projections of frequency, amounts generated, and hazard classifications;
 - 2. management methods to be used for each waste stream including temporary on-site storage, housekeeping, and best management practices to be employed, treatment methods and companies providing treatment services, waste-testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plan; a method for collecting weigh tickets or other methods for verifying the volume of transported and location of waste disposal; and,
 - 3. a method for reporting to demonstrate project compliance with construction waste diversion requirements of 65% pursuant to the Cal Green Code and Orange County's Construction & Demolition Program.

<u>Verification</u>: The project owner shall submit the C & D Environmental Resources Management and Recycling Plan to Orange County's Public Works Department for review and comment and the CPM for review and approval, no less than 30 days prior to the initiation of demolition activities at the site.

The project owner shall also document in each monthly compliance report (MCR) the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Construction and Demolition Waste

Management Plan; and update the Construction and Demolition Waste Management Plan as necessary to address current waste generation and management practices.

WASTE-5 Prior to demolition of pipelines, buildings, and associated structures, the project owner shall survey for asbestos-containing material (ACM) and notify the CPM of the results. In the case of a need to remove such material, the project owner shall complete and submit a copy of a South Coast Air Quality Management District Notification of Demolition or Renovation Form to the CPM as related to asbestos and other materials.

<u>Verification:</u> No less than 60 days prior to commencement of structure demolition, the project owner shall provide the Notification of Demolition or Renovation Form to the CPM for review. In the case of asbestos removal, the project owner shall inform the CPM, via the Monthly Compliance Report of the date when all ACM is removed from the site.

WASTE-6 The project owner shall report new or temporary hazardous waste generator identification numbers from the United States Environmental Protection Agency prior to generating any hazardous waste during demolition, construction, or operations.

Verification: The project owner shall keep a copy of the identification number(s) on file at the project site and provide documentation of the hazardous waste generation and notification and receipt of the number to the CPM in the next scheduled Monthly Compliance Report after receipt of the number. Submittal of the notification and issued number documentation to the CPM is only needed once, unless there is a change in ownership, operation, waste generation, or waste characteristics that requires a new notification to USEPA. Documentation of any new or revised hazardous waste generation notifications or changes in identification number shall be provided to the CPM in the next scheduled compliance report.

WASTE-7 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.

<u>Verification:</u> The project owner shall notify the CPM in writing within ten 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 way project-related wastes are managed.

- **WASTE-8** The project owner shall prepare an Operation Waste Management Plan for all wastes generated during operation of the facility and shall submit the plan to the CPM for review and approval. The plan shall include, at a minimum, the following:
 - 1. a detailed description of all operation and maintenance waste streams, including projections of amounts to be generated, frequency of generation, and waste hazard classifications;
 - management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans;
 - 3. information and summary records of conversations with the local Certified Unified Program Agency and the Department of Toxic Substances Control regarding any waste management requirements necessary for project activities. Copies of all required waste management permits, notifications of enforcement actions, and/or authorizations shall be included in the plan and updated as necessary;
 - 4. a detailed description of how facility wastes will be managed and any contingency plans to be employed, in the event of an unplanned closure or planned temporary facility closure; and
 - 5. A detailed description of how facility wastes will be managed and disposed upon closure of the facility.

<u>Verification:</u> The project owner shall submit the Operation Waste Management Plan to the CPM for approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.

The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current waste generation and management practices.

WASTE-9 The project owner shall ensure that all spills or releases of hazardous substances, materials, or waste are reported, cleaned up, and remediated as necessary, in accordance with all applicable federal, state, and local requirements.

Verification: The project owner shall document all unauthorized releases and spills of hazardous substances, materials, or wastes that occur on the project property or related pipeline and transmission corridors. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; amount of contaminated soil/material generated; how release was managed and material cleaned up; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release. Copies of the unauthorized spill documentation shall be provided to the CPM within 48 hours of the date the release was discovered.

WASTE-10 Prior to transportation of soils for disposal at the Olinda Alpha Landfill, the project owner shall obtain approval to dispose of soils at the Olinda Alpha Landfill from Orange County Waste and Recycling.

<u>Verification:</u> At least 30 days prior to transportation of soils for disposal to the Olinda Alpha Landfill, the project owner shall submit a Soils Information Form to Orange County Waste and Recycling and the CPM.

At least 5 days prior to transportation of soils for disposal to the Olinda Alpha Landfill, the project owner shall submit to the CPM Orange County Waste and Recycling's correspondence documenting its ability to accept the soils for disposal.

WORKER SAFETY AND FIRE PROTECTION

WORKER SAFETY-1 The project owner shall submit to the compliance project manager (CPM) a copy of the Project Construction Health and Safety Program containing the following:

- a Construction Personal Protective Equipment Program;
- a Construction Exposure Monitoring Program;
- a Construction Injury and Illness Prevention Program;
- a Construction Emergency Action Plan; and
- a Construction Fire Prevention Plan.

The Personal Protective Equipment Program, the Exposure Monitoring Program, and the Injury and Illness Prevention Program shall be submitted to the CPM for review and approval concerning compliance of the program with all applicable safety orders. The Construction Emergency Action Plan and the Fire Prevention Plan shall be submitted to the Orange County Fire Authority for review and comment prior to submittal to the CPM for approval.

<u>Verification:</u> At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and approval a copy of the Project Construction and Safety and Health Program. The project owner shall provide to the CPM a copy of a letter from the Orange County Fire Authority stating the fire department's comments on the Construction Fire Prevention Plan and the 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 items:

- an Operation Injury and Illness Prevention Plan;
- an Emergency Action Plan;
- a Hazardous Materials Management Program;
- a Fire Prevention Plan (Cal Code Regs., tit. 8, § 3221);
- a Fire Protection System Impairment Program; and

 a Personal Protective Equipment Program (Cal Code Regs, tit.8, §§ 3401—3411).

The Operation Injury and Illness Prevention Plan, Hazardous Materials Management Program, Emergency Action Plan, Fire Prevention Plan, Fire Protection System Impairment Program, and Personal Protective Equipment Program shall be submitted to the CPM for review and approval concerning compliance of the programs with all applicable safety orders. The Fire Prevention Plan, Fire Protection System Impairment Program, and the Emergency Action Plan shall also be submitted to the Orange County Fire Authority for review and comment.

<u>Verification:</u> At least 30 days prior to the start of first-fire or commissioning, the project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program. The project owner shall provide a copy to the CPM of a letter from the Orange County Fire Authority stating the fire department's timely comments on the Operations Fire Prevention Plan, Fire Protection System Impairment Program, and Emergency Action Plan.

- **WORKER SAFETY-3** The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant construction activities and relevant worker safety-related laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:
 - have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;
 - ensure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;
 - ensure that all construction and commissioning workers and supervisors receive adequate safety training;
 - conduct accident and safety-related incident investigations and provide emergency response reports for injuries, and inform the CPM of safetyrelated incidents; and

• ensure that all the plans identified in Conditions of Certification **WORKER SAFETY-1** and **-2** are implemented.

<u>Verification:</u> At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the Construction Safety Supervisor (CSS). The contact information of any replacement CSS shall be submitted to the CPM within one business day.

The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:

- a record of all employees trained for that month (all records shall be kept on site for the duration of the project);
- summary report of safety management actions and safety-related incidents that occurred during the month;
- report of any continuing or unresolved situations and incidents that may pose danger to life or health;
- report of any visits from Cal/OSHA and/or any complaints from workers to Cal/OSHA; and
- report of accidents, injuries, and near misses that occurred during the month.
- **WORKER SAFETY-4** The project owner shall make payments to the Delegate Chief Building Official (DCBO) for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the DCBO. Those services shall be in addition to other work performed by the DCBO. The Safety Monitor shall be selected from an independent company not affiliated with the DCBO and report directly to the DCBO and will be responsible for verifying that the Construction Safety Supervisor, as required in Condition of Certification **WORKER SAFETY-3**, implements all appropriate Cal/OSHA and Energy Commission safety requirements. The Safety Monitor shall conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill those responsibilities.

<u>Verification:</u> At least 60 days prior to the start of construction, the project owner shall provide proof of its agreement to fund the Safety Monitor services to the CPM for review and approval.

WORKER SAFETY-5 The project owner shall ensure that a portable automatic external defibrillator (AED) is located on site during construction and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functioning at all times. During construction, commissioning, and demolition, the following persons shall be trained in its use and shall be on site whenever the workers that they supervise are on site: the Construction Project Manager or delegate, the Construction Safety Supervisor or delegate, and all shift foremen. During operations, all power plant employees on site shall be trained in its use. The training program shall be submitted to the CPM for review and approval.

<u>Verification:</u> At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM proof that a portable automatic external defibrillator (AED) is available to be made available on site as soon as physically possible along with a copy of the training and maintenance program for review and approval.

WORKER SAFETY-6 The project owner shall prepare an Emergency Access Plan that shows a secondary emergency access to the Stanton site where the specifications of the roadway will comply with the Stanton Municipal Code and the 2016 (or latest edition) California Fire Code. A secondary access must be maintained to the standards listed above for the life of the project.

<u>Verification:</u> At least 60 days prior to the start of construction, or within a time frame approved by the CPM, the project owner shall submit the Emergency Access Plan showing the secondary emergency access to the Orange County Fire Authority for review and timely comment, and to the CPM for review and approval. If a change to the secondary access is proposed by the project owner, 90 days before it would occur, the project owner must submit the proposed change, with an updated Emergency Access Plan that shows the new proposed location/arrangement for the secondary emergency access road, to the Orange County Fire Authority for review and timely comment, and to CPM for review and approval.

WORKER SAFETY-7 The project owner shall adhere to all applicable provisions of the latest version of NFPA 850: Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations, as the minimum level of fire protection. The project owner shall interpret and adhere to all applicable NFPA 850 recommended provisions and actions stating "should" as "shall." In any situations where both NFPA 850 and the state or local LORS have application, the more restrictive shall apply.

<u>Verification:</u> The project owner shall ensure that the project adheres to all applicable provisions of NFPA 850. At least 60 days prior to the start of construction of

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the fire protection system, the project owner shall provide all fire protection system specifications and drawings to the Orange County Fire Authority for review and comment, to the CPM for review and approval, and to the DCBO for plan check approval and construction inspection.

WORKER SAFETY-8 The project owner shall ensure that the lithium ion battery energy storage system has UL 9540: UL Standard for Safety for Energy Storage Systems and Equipment certification. The project owner shall submit the certification along with the fire protection drawings and specifications for the ESS to the Orange County Fire Authority for review and comment and to the CPM for review and approval. The project owner shall also collaborate with the Orange County Fire Authority to assist the development of standard operating procedures for first responders to implement when confronting a fire occurring within the lithium ion ESS located on site.

Verification:

- (a) At least 60 days prior to the start of construction of the project, the project owner shall provide to the CPM:
 - (1) A copy of UL 9540 design certification for the ESS, or
 - (2) A copy of the contract with UL (or authorized UL agent) to perform a field certification during construction of the ESS to obtain UL 9540 certification.
- (b) At least 60 days prior to the start of construction of the ESS, the project owner shall:
 - (3) provide the complete ESS fire protection drawings and specifications to the Orange County Fire Authority for review and comment, and to the CPM for review and approval, and;
 - (4) submit to the CPM, a copy of a letter from UL stating that the design drawings for the ESS have been reviewed and meet UL 9540 requirements for performing a field certification.
- (c) At least 60 days prior to the start of ESS commissioning, the project owner shall provide a copy of a letter from the project owner to the OCFA offering collaboration and assistance in developing standard operating procedures for first responders to any lithium ion battery fires that may occur at the project site.
- (d) Prior to the start of commissioning, the project owner shall provide a copy of the final completed UL 9540 certification of the ESS to the CPM.

FACILITY DESIGN

GEN-1 The project owner shall design, construct, and inspect the project in accordance with the 2016 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 the edition that has been adopted by the California Building Standards Commission and published at least 180 days previously). The project owner shall ensure that all the provisions of the above applicable codes are enforced during the construction, addition, alteration, moving (onsite), demolition, repair, or maintenance of the completed facility.

In the event that the initial engineering designs are submitted to the CBO when the successor to the 2016 CBSC is in effect, the 2016 CBSC provisions 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.

The project owner shall ensure that all contracts with contractors, subcontractors, and suppliers clearly specify that all work performed and materials supplied comply with the codes listed above.

<u>Verification:</u> Within 30 days following receipt of the certificate of occupancy, the project owner shall submit to the 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.

Once the certificate of occupancy has been issued, the project owner shall inform the CPM at least 30 days prior to any construction, addition, alteration, moving, demolition, repair, or maintenance to be performed on any portion(s) of the completed facility that requires CBO approval for compliance with the above codes. The CPM will then determine if the CBO needs to approve the work.

GEN-2 Before submitting the initial engineering designs for CBO review, the project owner shall furnish the CPM and the CBO with a schedule of facility design submittals, and master drawings and master specifications list. The master drawings and master specifications list shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures, systems, and equipment. Major structures, systems, and equipment are structures and their associated components or equipment that are necessary for power production, costly or time consuming to repair or replace, are used for the storage, containment, or handling of hazardous or toxic materials, or could become potential health and safety hazards if not constructed according to applicable engineering LORS. The schedule shall contain the date of each submittal to the CBO. To facilitate audits by Energy Commission staff, the project owner shall provide specific packages to the CPM upon request.

<u>Verification:</u> At least 60 days (or a project owner- and CBO-approved alternative time frame) prior to the start of rough grading, the project owner shall submit to the CBO and to the CPM the schedule, and the master drawings and 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, systems, and equipment defined above in Condition of Certification **GEN-2**. Major structures and equipment shall be added to or deleted from the list only with CPM approval. The project owner shall provide schedule updates in the monthly compliance report.

GEN-3 The project owner shall make payments to the CBO (the Energy Commission) for design review, plan checks, construction inspections, and other applicable CBO activities, based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. If the Energy Commission delegates the CBO function to a third party or local agency, the project owner, at the Energy Commission's direction, shall make payments directly to the DCBO based upon a fee schedule negotiated between the Energy Commission and the DCBO. These fees may be consistent with the fees listed in the 2016 CBC, 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 otherwise agreed upon by the project owner and the CBO.

<u>Verification:</u> The project owner shall make the required payments to the CBO (the Energy Commission) in accordance with the agreement between the project owner and the CBO (the Energy Commission). If the Energy Commission delegates the CBO function to a third party or local agency, the project owner, at the Energy Commission's direction, shall make payments directly to the DCBO based upon a fee schedule

negotiated between the Energy Commission and the DCBO. The project owner shall send a copy of the DCBO's receipt of payment to the CPM in the next monthly compliance report indicating that applicable fees have been paid.

GEN-4 Prior to the start of rough grading, the project owner shall assign a Californiaregistered architect, or a structural or civil engineer, as the resident engineer (RE) in charge of the project.

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 that each part is clearly defined as a distinct unit. Separate assignments of general responsibility may be made for each designated part.

The RE shall:

- 1. Monitor progress of construction work requiring CBO design review and inspection to ensure compliance with LORS;
- 2. Ensure that construction of all facilities subject to CBO design review and inspection conforms in every material respect to applicable LORS, these conditions of certification, approved plans, and specifications;
- 3. Prepare documents to initiate changes in approved drawings and specifications when either directed by the project owner or as required by the conditions of the project;
- 4. Be responsible for providing project inspectors and testing agencies with complete and up-to-date sets 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 when they do not conform to approved plans and specifications.

The resident engineer (or his delegate) must be located at the project site, or be available at the project site within a reasonable period of time, during any hours in which construction takes place. The RE shall have the authority to halt construction and to require changes or remedial work if the work does not meet 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.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) 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) is subsequently reassigned or replaced, the project owner has five days 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 civil engineer; a soils, geotechnical, or civil engineer experienced and knowledgeable in the practice of soils engineering; and an engineering geologist. 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: 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; a mechanical engineer; and an electrical engineer. (California Business and Professions Code sections 6704, 6730, 6731, and 6736 require state registration to practice as a civil engineer or structural engineer in California).

The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (for example, 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.

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, geotechnical, or soils reports 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 the design of), 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 to 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, geotechnical, or soils reports containing field exploration reports, laboratory tests, and engineering analysis detailing the nature and extent of the soils that could be susceptible to liquefaction, rapid settlement, or collapse when saturated under load;
 - 3. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with requirements set forth in the

2016 CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both); and

4. Recommend field changes to the civil engineer and RE.

This engineer shall be authorized to halt earthwork and to require changes if site conditions are unsafe or do not conform to the predicted conditions used as the basis for design of earthwork or foundations.

- C. The engineering geologist shall:
 - 1. Review all the engineering geology reports and prepare a final soils grading report; and
 - 2. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 2016 CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both).
- D. 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;
 - 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.
- E. 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 to all of the mechanical engineering design requirements set forth in the Energy Commission's decision.
- F. 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.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) 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, soils (geotechnical) engineer, and engineering geologist assigned to the project.

At least 30 days (or project owner- and CBO-approved alternative time frame) 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, including prefabricated assemblies, 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 2016 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).

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. Inspect 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; 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, specifications, and other provisions of the applicable edition of the CBC.

<u>Verification:</u> At least 15 days (or project owner- and CBO-approved alternative time frame) 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 required corrective actions. 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, applicable sections of the CBC and/or other LORS.

<u>Verification:</u> 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. The project owner shall notify the CPM after obtaining the CBO's final approval. The project owner shall retain one set of approved engineering plans, specifications, and calculations (including all approved changes) at the

project site, or at another accessible location, during the operating life of the project. Electronic copies of the approved plans, specifications, calculations, and marked-up as-built shall be provided to the CBO for retention by the CPM.

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 the final approved engineering plans, specifications, and calculations described above, the project owner shall submit to the CPM a letter stating both that the above documents have been stored and the storage location of those documents.

Within 90 days of the completion of construction, the project owner shall provide to the CBO three sets of electronic copies of the above documents at the project owner's expense. These are to be provided in the form of "read only" (Adobe .pdf 6.0 or newer version) files, with restricted (password-protected) printing privileges, on archive quality compact discs.

- **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. A construction storm water pollution prevention plan (SWPPP);
 - 4. Related calculations and specifications, signed and stamped by the responsible civil engineer; and
 - 5. Soils, geotechnical, or foundation investigations reports required by the 2016 CBC.

<u>Verification:</u> At least 15 days (or project owner- and CBO-approved alternative time frame) 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.

<u>Verification:</u> 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 2016 CBC. 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. 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.

<u>Verification:</u> 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 work, the project owner shall obtain the CBO's approval of the final grading plans (including final changes) for the erosion and sedimentation control work. The civil engineer shall state that the work within his/her area of responsibility was done in accordance with the final approved plans.

Verification: Within 30 days (or project owner- and CBO-approved alternative time frame) of the completion of the erosion and sediment control mitigation and drainage work, the project owner shall submit to the CBO, for review and approval, the final grading plans (including final changes) and 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 the CBO's approval to the CPM in the next monthly compliance report.

STRUC-1 Prior to the start of any increment of construction, the project owner shall submit plans, calculations, and other supporting documentation to the CBO for design review and acceptance for all project structures and equipment identified in the CBO-approved master drawing and master specifications list. The design plans and calculations shall include the lateral force procedures and details as well as vertical calculations.

Construction of any structure or component shall not begin 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 (for example, 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;
- 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 prior to the start of on-site fabrication and installation of each structure, equipment support, or foundation;
- 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; and
- 5. Submit to the CBO the responsible design engineer's signed statement that the final design plans conform to applicable LORS.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of any increment of construction of any structure or component listed in the CBO-approved master drawing and master specifications list, the project

owner shall submit to the CBO the above final design plans, specifications and calculations, with a copy of the transmittal letter to the CPM.

The project owner shall submit to the CPM, in the next monthly compliance report, a copy of a statement from the CBO that the proposed structural plans, specifications, and calculations have been approved and comply with the requirements set forth in 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:
 - 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);
 - 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 2016 CBC.

<u>Verification:</u> If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit a 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. 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, of the reason for disapproval, and the revised corrective action to obtain CBO's approval.

STRUC-3 The project owner shall submit to the CBO design changes to the final plans required by the 2016 CBC, 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.

<u>Verification:</u> 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 abovementioned 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 the 2016 CBC shall, at a minimum, be designed to comply with the requirements of that chapter.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternate time frame) 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 monthly compliance report following receipt of such approvals. 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 the CBO-approved master drawing and master specifications list. The submittal shall also include the applicable quality assurance/quality control (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 that construction.

The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major piping and plumbing systems, subject to CBO design review and approval, and submit a signed statement to the CBO when the proposed piping and plumbing systems have been designed, fabricated, and installed in accordance with all of the applicable laws, ordinances, regulations and industry standards, which may include, but are not 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);
- NACE R.P. 0169-83;
- NACE R.P. 0187-87;
- NFPA 56;
- 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); and
- Title 24, California Code of Regulations, Part 2 (California Building Code).

The CBO may deputize inspectors to carry out the functions of the code enforcement agency.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) prior to the start of any increment of major piping or plumbing construction listed in the CBO-approved master drawing and master specifications list, 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 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 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 that installation.

The project owner shall:

- 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.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) 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 that 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.

Verification: At least 30 days (or project owner- and CBO-approved alternative time frame) 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 all electrical equipment and systems 110 Volts or higher (see a representative list, below) the project owner shall submit, for CBO design review and approval, the proposed final design, specifications, and calculations. 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.
- A. Final plant design plans shall include:
 - 1. one-line diagram for the 13.1 kV, 4.16 kV and 480 V systems;
 - 2. system grounding drawings;
 - 3. lightning protection system; and
 - 4. hazard area classification plan.
- B. Final plant calculations must establish:
 - 1. short-circuit ratings of plant equipment;
 - 2. ampacity of feeder cables;
 - 3. voltage drop in feeder cables;
 - 4. system grounding requirements;
 - coordination study calculations for fuses, circuit breakers and protective relay settings for the 13.1 kV, 4.16 kV and 110/480 V systems;
 - 6. system grounding requirements;

- 7. lighting energy calculations; and
- 8. 110 volt system design calculations and submittals showing feeder sizing, transformer and panel load confirmation, fixture schedules and layout plans.
- 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 energizing 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.

<u>Verification:</u> At least 30 days (or project owner- and CBO-approved alternative time frame) 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.

GEOLOGY AND PALEONTOLOGY

GEO-1 A Soils Engineering Report, as required by Section 1803 of the California Building Code (CBC, 2016), or its successor in effect at the time construction of the project commences, shall specifically include laboratory test data, associated geotechnical engineering analyses, and a thorough discussion of seismicity; liquefaction; dynamic compaction; compressible soils; corrosive soils; and ground rupture due to faulting. In accordance with the CBC, the report must also include recommendations for ground improvement and foundation systems necessary to mitigate these potential geologic hazards, if present. In accordance with the California Business and Professions Code, the appropriate qualified California licensed individual(s) is required to sign and seal the Soils Engineering Report.

Verification: The project owner shall include in the application for a gradingpermit a copy of the Soils Engineering Report which addresses the potential for strong seismic shaking; liquefaction; dynamic compaction; settlement due to compressible soils; corrosive soils: and ground rupture due to faulting, and a summary of how the results of the analyses were incorporated into the project's foundation and grading plan design for review and comment by the delegate chief building official (CBO). The project owner shall provide to the CPM a copy of the Soils Engineering Report, application for grading permit and any comments by the CBO at least 60 days prior tograding.

PAL-1 The project owner shall provide the CPM with the resume, qualifications, and contact information of its paleontological resource specialist (PRS) for review and approval. The PRS's 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 Qualified Professional Paleontologist as defined in the Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources by the Society of Vertebrate Paleontology (SVP, 2010). The experience of the PRS shall include the following:

- 1. Institutional affiliations, appropriate credentials, and college degree (M.S, Ph.D., or equivalent).
- 2. Ability to recognize and collect fossils in the field.
- 3. Local geological and biostratigraphic expertise.

- 4. Proficiency in identifying vertebrate and invertebrate fossils.
- 5. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.

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

- BS or BA degree in geology or paleontology and a minimum of one year of relevant experience monitoring in California; or
- AS or AA in geology, paleontology, or biology and a minimum of four years' relevant experience monitoring in California; or
- Enrollment in upper division classes pursuing a Bachelor's or more advanced degree in the field of geology or paleontology and a minimum of three years relevant monitoring experience in California.

If the approved PRS is replaced prior to completion of project mitigation and submittal of the paleontological resources report (PRR), the project owner shall obtain CPM approval of the replacement PRS. The project owner shall keep resumes on file for qualified paleontological resources monitors (PRMs). The PRM's resume shall include the names and contact information of references. If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM for review and approval.

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 to the CPM, whose approval must be obtained prior to initiation of ground disturbing activities.
- 2. At least 30 days prior to ground disturbance, the PRS or project owner shall provide a letter with resumes naming anticipated PRM's for the project. The letter shall state that the identified PRM's meet the minimum qualifications for paleontological resource monitoring as required by this condition of certification. If additional PRM's are needed during the project, the PRS shall provide additional letters and resumes to the CPM. The letter shall be provided to the CPM for approval no later than one week prior to the monitor's beginning on-site duties.

- 3. Prior to any change of the 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 lay-down 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 be acceptable for this purpose. The plan drawings must show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet and 1 inch = 100 feet. If the footprint of the project or its linear facilities change, the project owner shall provide maps and drawings reflecting those changes to the PRS and CPM.

If construction of the project proceeds 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. Before work commences 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 and construction field manager to confirm area(s) to be worked the following week, until ground disturbance is completed.

Verification:

- 1. 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.
- 2. If there are planned 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.
- 3. If there are changes to the scheduling of the construction phases, the project owner shall submit a letter to the CPM within five days of identifying the changes.
- **PAL-3** The project owner shall ensure that the PRS prepares a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) and submits the PRMMP to the CPM for review and approval. 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, sampling, and reporting activities, and may be modified with CPM approval. The PRMMP shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall include all updates and reside with the PRS, each PRM, the project's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the guidelines of the Society of Vertebrate Paleontology (SVP, 2010) and shall include, but not be limited to, the following:

- Procedures for and assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, fieldwork, 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 PRMMP procedures.
- 2. Identification of the person(s) expected to assist with each of the tasks required by the PRMMP and these 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 sampling is needed, a description of the sampling methodology, and how much sampling is expected to take place in which geologic units. Include descriptions of different sampling procedures that shall be used for fine-grained and coarse-grained units.
- 5. A discussion of the locations of where the monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling at these locations.
- A discussion of procedures to be followed: (a)in the event of a significant fossil discovery, (b) stopping construction, (c) resuming construction, and
 - (d) 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 into a retrievable storage collection in a public repository or museum that meet the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources.
- Identification of the institution that has agreed to receive 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.
- 10. A copy of the paleontological resources conditions of certification.
- 11. A copy of the daily monitoring log form.

<u>Verification:</u> At least 30 days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. 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 the project owner and the PRS shallprepare a CPM-approved Worker Environmental Awareness Program (WEAP).

The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect those resources. The purpose of the WEAP is to train project workers to recognize paleontologic resources and identify procedures they must follow to ensure there are no impacts to sensitive paleontologic resources. The WEAP shall include:

- 1. A discussion of applicable laws and penalties under the law.
- 2. Good quality photographs or physical examples of fossils expected to be found in units of high paleontologic sensitivity at, or near, the site.
- 3. Information that the PRS or PRM has the authority to stop or redirect construction in the event of a discovery or unanticipated impact to a paleontological resource.

- 4. Instruction that employees are to stop 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 WEAP certification of completion form signed by each worker indicating that he/she has received the training.
- 7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

The project owner shall submit the training script and, if the project owner is planning to use a video for training, a copy of the training video, with the set of reporting procedures for workers to follow that will be used to present the WEAP and qualify workers to conduct ground disturbing activities that could impact paleontologic resources.

Verification:

- 1. At least 30 days prior to ground disturbance, the project owner shall submit to the CPM for review and comment the draft WEAP, including the brochure and sticker. The submittal shall also include a draft training script and the set of reporting procedures for workers to follow.
- 2. At least 15 days prior to ground disturbance, the project owner shall submit to the CPM for approval the final WEAP and training script. If the project owner is planning to use a video for training, a copy of the training video shall be submitted following final approval of WEAP and training script.
- **PAL-5** No worker shall excavate or perform any ground disturbance activity prior to receiving CPM-approved WEAP training by the PRS, unless specifically approved by the CPM.

Prior to project ground disturbance the following workers shall be WEAP trained by the PRS in-person: project managers, construction supervisors, foremen, and all general workers involved with or operate ground-disturbing equipment or tools. Following the start of ground disturbing activities and after the initial WEAP training conducted prior to ground disturbance, a CPM- approved video or in-person training may be used for new employees. If a video is used a qualified trainer shall be present to monitor training and respond to questions. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous

materials, or other areas of interest or concern. A WEAP certification of completion form shall be used to document who has received the required training.

Verification:

- 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, trainer identification, and type of training (in-person and/or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.
- 2. If the project owner requests an alternate paleontological WEAP trainer, the resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct WEAP training prior to CPM authorization.
- **PAL-6** The project owner shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading and excavation in areas where potential fossil-bearing materials have been identified, both at the site and along any constructed linear facilities associated with the project. 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 PRS may not further delegate the responsibility for determining whether full-time monitoring is necessary.

The project owner shall ensure that the PRS and PRM(s) have the authority to stop 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:

- Any change of monitoring from the accepted schedule 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 and be included in the monthly compliance report. 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) keep a daily monitoring log of paleontological resource activities; copies of these logs shall be

submitted with the monthly compliance report. The name and contact information of PRM(s) and PRS who were making field observations will be included in the daily log. 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 notifies the CPM within 24 hours of the occurrence 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 within 24 hours, or Monday morning in the case of a weekend event. In the event construction has been stopped because of a paleontological find, such notification will be effected as soon as practical, but not later than 24-hours after a stop work order has been issued.
- 5. For excavations planned in material that is classified as having a moderate to high paleontological sensitivity prior to construction additional precautions may be required. Should excavation methods be proposed that would preclude effective monitoring and examination of paleontological resources encountered during excavation, appropriate mitigation involving education of the public about the lost resources will be proposed in the PRMMP.

The project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities to be included in each MCR. The summary shall 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, and other activities. A section of the report shall include the geologic units or subunits encountered, descriptions of samplings within each unit, and a list of identified fossils.

Negative findings, when no fossils are identified, shall also be reported. A final section of the report shall address any issues or concerns about the project relating to paleontologic monitoring, including any incidents of non-compliance or any changes to the monitoring plan that have been approved by the CPM. If no monitoring took place during the month, the

report shall include an explanation in the summary as to why monitoring was not conducted.

Verification:

- 1. A copy of the daily monitoring log of paleontological resource activities shall be included in the monthly compliance report (MCR).
- 2. 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 15 days in advance of any proposed changes in monitoring different from that identified in the PRMMP, which will require concurrence between the PRS and CPM. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.
- **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 ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information, and shall be submitted to the CPM for approval.

The report shall include, but not be limited to, a description and inventory of recovered fossil materials; a map showing the location of paleontological resources encountered; and the PRS' description of sensitivity and significance of those resources; and indicate if and how fossil material was curated in accordance with **PAL-3**.

Any portions of this report that involve any independent judgment or analysis of the earth's crust, and the rocks and other materials which compose it, must be done by or under the responsible charge of a California licensed Professional Geologist.

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

PAL-8 The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed, including collection of fossil material, preparation of fossil material for analysis, analysis of fossils, identification and inventory of fossils, preparation of fossils for curation, and delivery for curation of all significant paleontological resource materials encountered and collected during project construction. The project owner

shall pay all curation fees charged by the museum for fossil material collected and curated as a result of paleontological mitigation. The project owner shall also provide the curator with documentation showing the project owner irrevocably and unconditionally donates, gives, and assigns permanent, absolute, and unconditional ownership of the fossil material.

<u>Verification:</u> Within 60 days after the submittal of the PRR, the projectowner shall submit documentation to the CPM identifying the entity that will be responsible for curating collected specimens. This documentation shall also show that fees have been paid for curation and the owner relinquishes control and ownership of all fossil material.

Certification of Completion Worker Environmental Awareness Program STANTON ENERGY CENTER (16-AFC-01)

This is to certify these individuals have completed a mandatory California Energy Commission-approved Worker Environmental Awareness Program (WEAP). The WEAP includes pertinent information on cultural, paleontological, and biological resources for all personnel (that is, construction supervisors, crews, and plant operators) working on site or at related facilities. By signing below, the participant indicates that he/she understands and shall abide by the guidelines set forth in the program materials. Include this completed form in the Monthly Compliance Report.

No.	Employee Name	Title/Company	Signature
1.			
2.			
3.			
4.			
5.			
6.			
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20.			
21.			
22.			
23.			
24.			
25.			
	Cultural Trainer:	_Signature:	Date://
	Paleo Trainer:		
	Biological Trainer:	_Signature:	Date://

TRANSMISSION SYSTEM ENGINEERING

TSE-1 The project owner shall furnish to the compliance project manager (CPM) and to the delegate chief building official (CBO) a schedule of transmission facility design submittals, a Master Drawing List, a Master Specifications List, and a Major Equipment and Structure List. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment. To facilitate audits by Energy Commission staff, the project owner shall provide designated packages to the CPM when requested.

Verification: Prior to the start of construction of transmission facilities, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the CBO and to the CPM. The schedule shall contain a description and list of proposed submittal packages for design, calculations, and specifications for major structures and equipment (see list of major equipment in **Table 1:** Major Equipment List below). Additions and deletions shall be made to the table only with CPM and CBO approval. The project owner shall provide schedule updates in the monthly compliance report.

Breakers		
Step-up transformer		
Switchyard		
Busses		
Surge arrestors		
Disconnects		
Take-off facilities		
Electrical control building		
Switchyard control building		
Transmission pole/tower		
Grounding system		

Table 1: Major Equipment List

- **TSE-2** For the power plant switchyard, outlet line, and termination, the project owner shall not begin any construction until plans for that increment of construction have been approved by the CBO. These plans, together with design changes, and design change notices, shall remain on the site for one year after completion of construction. The project owner shall request that the CBO inspect the installation to ensure compliance with the requirements of applicable LORS. The following activities shall be reported in the monthly compliance report:
 - a) receipt or delay of major electrical equipment;
 - b) testing or energization of major electrical equipment; and
 - c) the number of electrical drawings approved, submitted for approval, and still to be submitted.

Prior to the start of each increment of construction, the project owner shall submit to the CBO for review and approval the final design plans, specifications, and calculations for equipment and systems of the power plant switchyard, outlet line, and termination, including a copy of the signed and stamped statement from the responsible electrical engineer verifying compliance with all applicable LORS, and send the CPM a copy of the transmittal letter in the next monthly compliance report.

- **TSE-3** The project owner shall ensure that the design, construction, and operation of the proposed transmission facilities will conform to all applicable LORS and the requirements listed below. The project owner shall submit the required number of copies of the design drawings and calculations, as determined by the CBO. Once approved, the project owner shall inform the CPM and CBO of any anticipated changes to the design, and shall submit a detailed description of the proposed change(s) and complete engineering, environmental, and economic rationale for the change, to the CPM and CBO for review and approval.
 - a) The power plant outlet line shall meet or exceed the electrical, mechanical, civil, and structural requirements of CPUC General Order 95, CPUC General Order 128, or National Electric Safety Code (NESC); Title 8 of the California Code of Regulations (Title 8); Articles 35, 36 and 37 of the *High Voltage Electric Safety Orders*, California ISO standards, National Electric Code (NEC) and related industry standards.
 - b) Breakers and busses in the power plant switchyard and other switchyards, where applicable, shall be sized to comply with a short-circuit analysis.

- c) 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.
- d) The project conductors shall be sized to accommodate the full output of the project.
- e) Termination facilities shall comply with applicable SCE interconnection standards.
- f) The project owner shall provide to the CPM:
 - i) A copy of the executed LGIA signed by the SCE and the project owner and approved by the Federal Energy Regulatory Commission.

Prior to the start of construction or start of modification of transmission facilities, the project owner shall submit to the CBO for approval:

- a) Design drawings, specifications, and calculations conforming with CPUC General Order 95, CPUC General Order 128, or National Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles 35, 36 and 37 of the *High Voltage Electric Safety Orders*, CA ISO standards, National Electric Code (NEC), and related industry standards, for the poles/towers, foundations, anchor bolts, conductors, grounding systems, and major switchyard equipment;
- b) For each element of the transmission facilities identified above, the submittal package to the CBO shall contain the design criteria, a discussion of the calculation method(s), a sample calculation based on "worst case conditions,"³ and a statement signed and sealed by the registered engineer in responsible charge, or other acceptable alternative verification, that the transmission element(s) will conform with CPUC General Order 95, CPUC General Order 128 or National Electric Safety Code (NESC); Title 8 of the California Code and Regulations (Title 8); Articles 35, 36 and 37 of the *High Voltage Electric Safety Orders*, California ISO standards, National Electric Code (NEC), and related industry standards;
- c) Electrical one-line diagrams signed and sealed by the registered professional electrical engineer in charge, a route map, and an

³ Worst-case conditions for the foundations would include for instance, a dead-end or angle pole.

engineering description of the equipment and configurations covered by requirements **TSE-3** a) through f); and

 A copy of the executed Large Generator Interconnection Agreement (LGIA) signed by SCE and the project owner and approved by the Federal Energy Regulatory Commission.

Prior to the start of construction or modification of transmission facilities, the project owner shall inform the CBO and the CPM of any anticipated changes to the design that are different from the design previously submitted and approved and shall submit a detailed description of the proposed change and complete engineering, environmental, and economic rationale for the change, to the CPM and CBO for review and approval.

- **TSE-4** The project owner shall provide the following notice to the California Independent System Operator (California ISO) prior to synchronizing the facility with the California Transmission system:
 - 1. At least one week prior to synchronizing the facility with the grid for testing, provide the California ISO a letter stating the proposed date of synchronization; and
 - 2. At least one business day prior to synchronizing the facility with the grid for testing, provide telephone notification to the California ISO Outage Coordination Department.

The project owner shall provide copies of the California ISO letter to the CPM when it is sent to the California ISO one week prior to initial synchronization with the grid. The project owner shall contact the California 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 California ISO shall be provided electronically to the CPM one day before synchronizing the facility with the California transmission system for the first time.

TSE-5 The project owner shall be responsible for the inspection of the transmission facilities during and after project construction, and any subsequent CPM- and CBO-approved changes thereto, to ensure conformance with CPUC General Order (GO) 95, CPUC GO 128, or NESC, Title 8, CCR, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", applicable interconnection standards, as well as NEC and related industry standards. In case of non-conformance, the project owner shall inform the CPM and CBO in writing, within 10 days of discovering such non-conformance, and describe the corrective actions to be taken.

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

- 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. A statement attesting to conformance with CPUC GO 95, CPUC GO 128, 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, and related industry standards.
- 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 electrical, 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 registered engineer in charge.

COMPLIANCE CONDITIONS OF CERTIFICATION

Compliance Table 1: Summary of Compliance Conditions of Certification

Condition Number	Subject	Description			
COM-1	Unrestricted Access	The project owner shall grant Energy Commission staff and delegate agencies or consultants unrestricted access to the power plant site.			
COM-2	Compliance Record	The project owner shall maintain project files on-site. Energy Commission staff and delegate agencies shall be given unrestricted access to the files.			
COM-3	Compliance Verification Submittals	The project owner is responsible for the delivery and content of all verification submittals to the CP regardless of whether the conditions were satisfied directly by the project owner or by an agent.			
COM-4	Pre-construction Matrix and Tasks Prior to Start of Construction	Construction shall not commence until all of the following activities/submittals have been completed:			
		 Project owner has submitted a pre-construction matrix identifying conditions to be fulfilled before the start of construction; 			
		Project owner has completed all pre-construction conditions to the CPM's satisfaction; and			
		CPM has issued a letter to the project owner authorizing construction.			
COM-5	Compliance Matrix	The project owner shall submit a compliance matrix (in a spreadsheet format) with each Monthl and Annual Compliance Report, which includes the current status of all Compliance conditions certification.			
COM-6	Monthly Compliance Reports and Key Events List	uring construction, the project owner shall submit Monthly Compliance Reports (MCRs) which clude specific information. The first MCR is due 1 one month following the docketing of the Ene ommission's Decision on the project and shall include an initial list of dates for each of the ever entified on the Key Events List.			
COM-7	Periodic and Annual Compliance Reports	After construction ends, and throughout the life of the project, the project owner shall submit Annual Compliance Reports (ACRs) instead of MCR's.			
COM-8	Confidential Information	Any information the project owner designates as confidential shall be submitted to the Energy Commission's Executive Director with a request for confidentiality.			
COM-9	Annual Fees	Required payment of the Annual Energy Facility Compliance Fee.			
COM-10	Amendments, Staff- Approved Project Modifications, Ownership Changes, and Verification Changes	The project owner shall petition the Energy Commission to delete or change a condition of certification, modify the project design or operational requirements, and/or transfer ownership or operational control of the facility. Petitions to Amend require the payment of amendment processing fees.			
COM-11	Reporting of Complaints, Notices, and Citations	Prior to the start of construction, the project owner shall provide all property owners within a one- mile radius a telephone number to contact project representatives with questions, complaints, or concerns. The project owner shall respond to all recorded complaints within 24 hours. Within 5 five days of receipt, the project owner shall report to the CPM all notices, complaints, violations, and citations.			

Condition Number	Subject	Description
COM-12	Site Contingency Plan	No less than 60 days prior to the start of commercial operation, the project owner shall submit an on-site Contingency Plan to ensure protection of public health and safety and environmental quality during a response to an emergency.
COM-13	Incident-Reporting Requirements	The project owner shall notify the CPM within one 1 hour of an incident, submit a detailed incident report within 1 one week, maintain records of incident report, and submit public health and safety documents with employee training provisions.
COM-14	Non-Operation	No later than two weeks prior to a facility's planned non-operation, or no later than one week after the start of unplanned non-operation, the project owner shall notify the CPM, interested agencies, and nearby property owners of this status. During non-operation, the project owner shall provide written updates to the CPM.
COM-15	Facility Closure Planning	No less than one year prior to closing, or upon an order compelling permanent closure, the project owner shall submit a Final Closure Plan and Cost Estimate.

- **COM-1 Unrestricted Access**. The project owner shall take all steps necessary to ensure that the CPM, responsible Energy Commission staff, and delegate agencies or consultants, have unrestricted access to the facility site, related facilities, project-related staff, and the records maintained on-site for the purpose of conducting audits, surveys, inspections, or general or closure- related 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, whether such visits are by the CPM in person or through representatives from Energy Commission staff, delegated agencies, or consultants.
- **COM-2 Compliance Record**. The project owner shall maintain electronic copies of all project files and submittals on-site, or at an alternative site approved by the CPM, for the operational life and closure of the project. The files shall also contain at least one hard copy of:
 - 1. the facility's Final Decision;
 - 2. all amendment petitions and Energy Commission orders;
 - 3. all site-related environmental impact and survey documentation;
 - 4. all appraisals, assessments, and studies for the project;
 - 5. all finalized original and amended structural plans and "as-built" drawings for the entire project;
 - 6. all citations, warnings, violations, or corrective actions applicable to the project, and
 - 7. the most current versions of any plans, manuals, and training documentation required by the conditions of certification or applicable LORS.

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

COM-3: Compliance Verification Submittals. Verification lead times associated with the start of construction may require the project owner to file submittals during AFC or amendment processing, particularly if construction is planned to commence shortly after certification. The verification procedures, unlike the conditions, may be modified as necessary by the CPM after notice to the project owner.

A cover letter from the project owner or an authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the project by AFC number, cite the appropriate condition of certification number(s), and give a brief description of the subject of the submittal. When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal and the condition(s) of certification applicable.

All reports and plans required by the project's conditions of certification shall be submitted in a searchable electronic format (.pdf, MS Word or Excel, etc.) and include standard formatting elements such as a table of contents identifying by title and page number each section, table, graphic, exhibit, or addendum. All report and/or plan graphics and maps shall be adequately scaled and shall include a key with descriptive labels, directional headings, a bar scale, and the most recent revision date.

The project owner is responsible for the content and delivery of all verification submittals to the CPM showing that the actions required by the verification were satisfied by the project owner or an agent of the project owner. All submittals shall be accompanied by an electronic copy on an electronic storage medium, or by e-mail, as agreed upon by the CPM. If hard copy submittals are required, please address as follows:

Compliance Project Manager Stanton Energy Reliability Center (16-AFC-01C) California Energy Commission 1516 Ninth Street (MS-2000) Sacramento, CA 95814

COM-4 Pre-Construction Matrix and Tasks Prior to Start of Construction. Prior to construction, the project owner shall submit to the CPM a compliance matrix including only those conditions that must be fulfilled before the start of construction. The matrix shall be included with the project owner's first compliance submittal or prior to the first pre-construction meeting, whichever comes first, and shall be submitted in a format similar to the description below.

Site mobilization and construction activities shall not start until the following have occurred:

- 1. the project owner has submitted the pre-construction matrix and all compliance verifications pertaining to pre-construction conditions of certification; and
- 2. the CPM has issued an authorization-to-construct letter to the project owner.

The deadlines for submitting various compliance verifications to the CPM allow staff sufficient time to review and comment on, and, if necessary, also allow the project owner to revise the submittal in a timely manner. These procedures help ensure that project construction proceeds according to schedule. Failure to submit required compliance documents by the specified deadlines may result in delayed authorizations to commence various stages of the project.

If the project owner anticipates site mobilization immediately following project certification, it may be necessary for the project owner to file compliance submittals prior to project certification. In these instances, compliance verifications can be submitted in advance of the required deadlines and the anticipated authorizations to start construction. The project owner must understand that submitting items required in compliance verifications prior to these authorizations is at the owner's own risk. Any approval by Energy Commission staff prior to project certification is subject to change based upon the Commission Decision, or amendment thereto, and early staff compliance approvals do not imply that the Energy Commission will certify the project for actual construction and operation.

- **COM-5 Compliance Matrix**. The project owner shall submit a compliance matrix to the CPM with each MCR and ACR. The compliance matrix shall identify:
 - 1. the technical area (e.g., biological resources, facility design, etc.);
 - 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 Delegate Chief Building Official (DCBO), CPM, or delegate agency, if applicable;
 - 7. the compliance status of each condition (e.g., "not started," "in progress" or "completed" (include the date)); and
 - 8. if the condition was amended, the updated language and the date the amendment

was proposed or approved.

The CPM can provide a template for the compliance matrix upon request.

COM-6 Monthly Compliance Report The first MCR is due one month following the docketing of the project's Decision unless otherwise agreed to by the CPM. The first MCR shall include the AFC number and 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 Compliance Conditions and Compliance Monitoring Plan section.)

During pre-construction, construction, or closure, the project owner or authorized agent shall submit an electronic searchable version of the MCR to the CPM within 10 business days after the end of each reporting month.

MCRs shall be submitted each month until construction is complete and the final certificate of occupancy is issued by the DCBO. MCRs shall be clearly identified for the month being reported. The MCR 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 MCR. Each of these items shall be identified in the transmittal letter, as well as the conditions they satisfy, and submitted as attachments to the MCR;
- 3. an initial, and thereafter updated, compliance matrix showing the status of all conditions of certification;
- 4. a list of conditions 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, and permits issued by, other governmental agencies during the month;
- 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;

- 10. a listing of incidents, complaints, notices of violation, official warnings, and citations received during the month; a list of any incidents that occurred during the month, a description of the actions taken to date to resolve the issues; and the status of any unresolved actions noted in the previous MCRs.
- **COM-7** Periodic and Annual Compliance Reports. After construction is complete, the project must submit searchable electronic ACRs to the CPM, as well as other periodic compliance reports (PCRs) required by the various technical disciplines. ACRs shall be completed for each year of commercial operation and are due each year on a date agreed to by the CPM. Other PCRs (e.g. quarterly reports or decommissioning reports to monitor closure compliance), may be specified by the CPM. The searchable electronic copies may be filed on an electronic storage medium or by e-mail, subject to CPM approval. Each ACR must include the AFC number, identify the reporting period, and contain the following:
 - an updated compliance matrix which shows the status of all conditions of certification (fully satisfied conditions do not need to be included in the matrix after they have been reported as completed);
 - 2. a summary of the current project operating status and an explanation of any significant changes to facility operations during the year;
 - documents required by specific conditions to be submitted along with the ACR; each of these items shall be identified in the transmittal letter with the condition(s) it satisfies, and submitted as an attachment to the ACR;
 - 4. a cumulative list of all post-certification changes approved by the Energy Commission or 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 Site Contingency Plan, including amendments and plan updates; and
 - 10. a listing of complaints, incidents, notices of violation, official warnings, and citations received during the year, a description of how the issues were resolved, and the status of any unresolved complaints.

- **COM-8 Confidential Information.** Any information that the project owner designates as confidential shall be submitted to the Energy Commission's Executive Director with an application for confidentiality, pursuant to Title 20, California Code of Regulations, section 2505(a). Any information deemed confidential pursuant to the regulations will remain undisclosed, as provided in Title 20, California Code of Regulations, section 2501 et seq.
- **COM-9** Annual Energy Facility Compliance Fee. Pursuant to the provisions of section 25806(b) of the Public Resources Code, the project owner is required to pay an annually adjusted compliance fee. Current compliance fee information is available on the Energy Commission's website at http://www.energy.ca.gov/siting/filing_fees.html. The project owner may also contact the CPM for the current fee information. The initial payment is due on the date the Energy Commission dockets its Final Decision. All subsequent payments are due by July 1 of each year in which the facility retains its certification.
- **COM-10** Amendments, Staff-Approved Project Modifications, Ownership Changes, and Verification Changes. The project owner shall petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to modify the design, operation, or performance requirements of the project or linear facilities, or to transfer ownership or operational control of the facility. The CPM will determine whether staff approval will be sufficient, or whether Commission approval will be necessary. It is the project owner's responsibility to contact the CPM to determine if a proposed project change triggers the requirements of section 1769. Section 1769 details the required contents for a Petition to Amend an Energy Commission Decision. The only change that can be requested by means of a letter to the CPM is a request to change the verification method of a condition of certification.

A project owner is required to submit a \$5,000 fee for every petition to amend a previously certified facility, pursuant to Public Resources Code section 25806(e). If the actual amendment processing costs exceed \$5,000.00, the total Petition to Amend reimbursement fees owed by a project owner will not exceed \$830,336, adjusted annually. Current amendment fee information is available on the Energy Commission's website at <u>http://www.energy.ca.gov/siting/filing_fees.html</u>.

COM-11 Reporting of Complaints, Notices, and Citations. Prior to the start of construction or closure, the project owner shall send a letter to property owners 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 must include automatic answering with date and time stamp recording.

The project owner shall respond to all recorded complaints within 24 hours or the next business day. The project owner shall post the telephone number on-site and make it

easily visible to passersby during construction, operation, and closure. The project owner shall provide the contact information to the CPM and promptly report any disruption to the contact system or telephone number change to the CPM, who will provide it to any persons contacting him or her with a complaint.

Within five business days of receipt, the project owner shall report, and provide copies to the CPM, all complaints, including, but not limited to, noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the **Noise and Vibration** conditions of certification. All other complaints shall be recorded on the

complaint form (Attachment A) at the end of this compliance plan. Additionally, the project owner must include in the next MCR, ACR or PCR, copies of all complaints, notices, warnings, citations and fines, a description of how the issues were resolved, and the status of any unresolved or ongoing matters.

- **COM-12** Emergency Response Site Contingency Plan. No less than 60 days prior to the start of construction (or other CPM-approved) date, the project owner shall submit, for CPM review and approval, an Emergency Response Site Contingency Plan (Contingency Plan). Subsequently, no less than 60 days prior to the start of commercial operation, the project owner shall update (as necessary) and resubmit the Contingency Plan for CPM review and approval. The Contingency Plan shall evidence a facility's coordinated emergency response and recovery preparedness for a series of reasonably foreseeable emergency events. The CPM may require Contingency Plan updating over the life of the facility. Contingency Plan elements include, but are not limited to:
 - 1. a site-specific list and direct contact information for persons, agencies, and responders to be notified for an unanticipated event;
 - 2. a detailed and labeled facility map, including all fences and gates, the windsock location (if applicable), the on and off-site assembly areas, and the main roads and highways near the site;
 - 3. a detailed and labeled map of population centers, sensitive receptors, and the nearest emergency response facilities;
 - 4. a description of the on-site, first response and backup emergency alert and communication systems, site-specific emergency response protocols, and procedures for maintaining the facility's contingency response capabilities, including a detailed map of interior and exterior evacuation routes, and the planned location(s) of all permanent safety equipment;

- 5. an organizational chart including the name, contact information, and first aid/emergency response certification(s) and renewal date(s) for all personnel regularly on-site;
- 6. a brief description of reasonably foreseeable, site-specific incidents and accident sequences (on- and off-site), including response procedures and protocols and site security measures to maintain twenty-four-hour site security;
- 7. procedures for maintaining contingency response capabilities; and
- 8. the procedures and implementation sequence for the safe and secure shutdown of all non-critical equipment and removal of hazardous materials and waste (see also specific conditions of certification for the technical areas of **Public Health**, **Waste Management**, **Hazardous Materials Management**, and Worker Safety).
- **COM-13** Incident-Reporting Requirements. The Energy Commission needs timely and clear information on incidents that have occurred (or are still ongoing) at the project site. Energy Commission staff requires that the project owner notify the CPM within one hour after it is safe and feasible to do so. The list of incidents includes but is not limited to, any of the following:
 - Any release of hazardous or non-hazardous materials to the environment that could result in public concerns due to fire, smoke, noise, odor, visual plume or potential health impacts, or one that requires notification to, or emergency response by, any federal, state, or local agency; and,
 - The discharge (including accidental) of onsite fixed emergency fire or plume suppression equipment (excluding portable hand held fire extinguishers) for other than routine maintenance, readiness testing, or training; or,
 - Any breach of the power plant's physical or cyber security that requires notification to, or emergency response by, any federal, state, or local agency.

Within six business days of an incident, the project owner shall submit to the CPM an incident report that includes, as appropriate and available, the following information:

- Description of the incident, including its date, time, and location;
- Suspected cause of the incident;
- Location of any suspected off-site impacts;

- Federal, state, and local agencies notified;
- Responding agencies;
- Emergency response actions taken;
- Hazardous materials released and estimates of quantities released;
- Suspected injuries, fatalities, or property damage;
- Name, phone number, and e-mail address of a facility contact person(s) having knowledge of the incident; and
- Initial corrective actions.

After the initial 6-day report, the project owner shall start submitting monthly status reports; within 48-hours of a request by the CPM, the project owner shall submit a status report. Status reports shall include the activities already taken, and those currently being taken, to remedy the impacts of the incident. The CPM will determine when reporting is no longer needed. The project owner shall maintain all incident records and reports for the life of the project. A report or a lack of a report would not trigger or preclude staff from investigating incidents at the facilities in the normal course of business.

COM-14 Non-Operation and Repair/Restoration Plans.

(a) If the facility ceases operation temporarily (excluding planned and unplanned maintenance for longer than one week (or other CPM- approved date), but less than three months (or other CPM-approved date), the project owner shall notify the CPM. Notice of planned non-operation shall be given at least two weeks prior to the scheduled date. Notice of unplanned non-operation shall be provided no later than one week after non-operation begins.

For any non-operation, a Repair/Restoration Plan for conducting the activities necessary to restore the facility to availability and reliable and/or improved performance shall be submitted to the CPM within one week after notice of non-operation is given. If non-operation is due to an unplanned incident, temporary repairs and/or corrective actions may be undertaken before the Repair/Restoration Plan is submitted. The Repair/Restoration Plan shall include:

- 1. Identification of operational and non-operational components of the plant;
- 2. A detailed description of the repair and inspection or restoration activities;
- 3. A proposed schedule for completing the repair and inspection or restoration activities;

- 4. An assessment of whether or not the proposed activities would require changing, adding, and/or deleting any conditions of certification, and/or would cause noncompliance with any applicable LORS; and
- 5. Planned activities during non-operation, including any measures to ensure continued compliance with all conditions of certification and LORS.
- (b) Written monthly updates (or other CPM-approved intervals) to the CPM for nonoperational periods, until operation resumes, shall include:
 - 1. Progress relative to the schedule;
 - 2. Developments that delayed or advanced progress or that may delay or advance future progress;
 - 3. Any public, agency, or media comments or complaints; and
 - 4. Projected date for the resumption of operation.
- (c) During non-operation, all applicable conditions of certification and reporting requirements remain in effect. If, after one year from the date of the project owner's last report of productive repair/restoration plan work, the facility does not resume operation or does not provide a plan to resume operation, the Executive Director may assign suspended status to the facility and recommend commencement of permanent closure activities. Within 90 days of the Executive Director's determination, the project owner shall do one of the following:
 - 1. If the facility has a closure plan, the project owner shall update it and submit it for Energy Commission review and approval; or
 - 2. If the facility does not have a closure plan, the project owner shall develop one consistent with the requirements in this Compliance Plan and submit it for Energy Commission review and approval.
- **COM-15 Facility Closure Planning.** To ensure that a facility's eventual permanent closure and maintenance do not pose a threat to public health and safety and/or to environmental quality, the project owner shall coordinate with the Energy Commission to plan and prepare for eventual permanent closure.

Final Closure Plan and Cost Estimate

(a) No less than one year (or other CPM-approved date) prior to initiating a permanent facility closure, or upon an order compelling permanent closure, the project owner shall submit for Energy Commission review and approval a Final Closure Plan and Cost Estimate, which includes any site maintenance and monitoring. Prior to submittal of the facility's Final Closure Plan to the Energy Commission, the project owner and the CPM will hold a meeting to discuss the specific contents of the plan. In the event that significant issues are associated with the plan's approval, the CPM will hold one or more workshops and/or the Energy Commission may hold public hearings as part of its approval procedure.

- (b) Final Closure Plan and Cost Estimate contents include, but are not limited to:
 - 1. a statement of specific Final Closure Plan objectives;
 - 2. a statement of qualifications and resumes of the technical experts proposed to conduct the closure activities, with detailed descriptions of previous power plant closure experience;
 - identification of any facility-related installations or maintenance agreements not part of the Energy Commission certification, designation of who is responsible for these, and an explanation of what will be done with them after closure;
 - 4. a comprehensive scope of work and itemized budget for permanent plant closure and site maintenance activities, with a description and explanation of methods to be used, broken down by phases, including, but not limited to:
 - a. dismantling and demolition;
 - b. recycling and site clean-up;
 - c. impact mitigation and monitoring;
 - d. site remediation and/or restoration;
 - e. exterior maintenance, including paint, landscaping and fencing;
 - f. site security and lighting; and
 - g. any contingencies.
 - 5. a final cost estimate for all closure activities, by phases, including site monitoring and maintenance costs, and long-term equipment replacement;
 - a schedule projecting all phases of closure activities for the power plant site and all appurtenances constructed as part of the Energy Commission-certified project;
 - 7. an electronic submittal package of all relevant plans, drawings, risk assessments, and maintenance schedules and/or reports, including an above and below-ground infrastructure inventory map and registered engineer's or

DCBO's assessment of demolishing the facility; additionally, for any facility that permanently ceased operation prior to submitting a Final Closure Plan and Cost Estimate and for which only minimal or no maintenance has been done since, a comprehensive condition report focused on identifying potential hazards;

- 8. all information additionally required by the facility's conditions of certification applicable to plant closure;
- 9. an equipment disposition plan, including:
 - a. recycling and disposal methods for equipment and materials; and
 - b. identification and justification for any equipment and materials that will remain on-site after closure.
- 10. a site disposition plan, including but not limited to proposed rehabilitation, restoration, and/or remediation procedures, as required by the conditions of certification and applicable LORS, and site maintenance activities;
- 11. identification and assessment of all potential direct, indirect, and cumulative impacts and proposal of mitigation measures to reduce significant adverse impacts to a less-than-significant level. Potential impacts to be considered shall include, but not be limited to:
 - a. traffic;
 - b. noise and vibration;
 - c. soil erosion;
 - d. air quality degradation;
 - e. solid waste;
 - f. hazardous materials;
 - g. waste water discharges; and
 - h. contaminated soil;
- 12. identification of all current conditions of certification, LORS, federal, state, regional, and local planning efforts applicable to the facility, and proposed strategies for achieving and maintaining compliance during closure;
- 13. updated mailing list and Listserv of all responsible agencies, potentially interested parties, and property owners within one mile of the facility;

- 14. identification of alternatives to plant closure and assessment of the feasibility and environmental impacts of these; and
- 15. description of and schedule for security measures and safe shutdown of all non-critical equipment and removal of hazardous materials and waste (see conditions of certification **Public Health**, **Waste Management**, **Hazardous Materials Management**, and Worker Safety).

If the Energy Commission-approved Final Closure Plan and Cost Estimate procedures are not initiated within one year of the plan approval date, it shall be updated and re-submitted to the Energy Commission for supplementary review and approval. If a project owner initiates but then suspends closure activities, and the suspension continues for longer than one year, the Energy Commission may initiate corrective actions against the project owner to complete facility closure. The project owner remains liable for all costs of contingency planning and closure.

KEY EVENTS LIST

PROJECT:

COMPLIANCE PROJECT MANAGER:

EVENT DESCRIPTION	DATE
Certification Date	
Obtain Site Control	
On-line Date	
POWER PLANT SITE ACTIVITIES	
Start Site Assessment/Pre-construction	
Start Site Mobilization/Construction	
Begin Pouring Major Foundation Concrete	
Begin Installation of Major Equipment	
Completion of Installation of Major Equipment	
First Combustion of Turbine	
Obtain Building Occupation Permit	
Start Commercial Operation	
Complete All Construction	
TRANSMISSION LINE ACTIVITIES	
Start Transmission Line Construction	
Complete Transmission Line Construction	
Synchronization with Grid and Interconnection	
FUEL SUPPLY LINE ACTIVITIES	
Start Gas Pipeline Construction and Interconnection	
Complete Gas Pipeline Construction	
WATER SUPPLY LINE ACTIVITIES	
Start Water Supply Line Construction	
Complete Water Supply Line Construction	
Start Recycled Water Supply Line Construction	
Complete Recycled Water Supply Line Construction	

COMPLAINT LOG NUMBER:______DOCKET NUMBER:_____

ATTACHMENT A COMPLAINT REPORT AND RESOLUTION FORM

PROJECT NAME:

COMPLAINANT INFORMATION

NAME:	PHONE NUMBER:							
ADDRESS:								
EMAIL:								
COMPLAINT								
TE COMPLAINT RECEIVED:TIME COMPLAINT RECEIVED:								
COMPLAINT RECEIVED BY:	TELEPHONE	IN WRITING (COPY ATTAC	CHED)					
DATE OF FIRST OCCURRENCE:	_							
DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND	URATION):							
FINDINGS OF INVESTIGATION BY PLANTPERSONNEL:								
DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT?			YES	🗌 NO				
DATE COMPLAINANT CONTACTED TO DISCUSSFINDINGS:								
DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAIN	NT RESOLUTION:							
DOES COMPLAINANT AGREE WITH PROPOSED RESOLUTION?			YES	🗌 NO				
IF NOT, EXPLAIN:								

CORRECTIVE ACTION

IF CORRECTIVE ACTION NECESSARY, DATE COMPLETED:
DATE FIRST LETTER SENT TO COMPLAINANT(COPY ATTACHED):
DATE FINAL LETTER SENT TO COMPLAINANT(COPY ATTACHED):
OTHER RELEVANT INFORMATION:

"This information is certified to be correct."

_____DATE: _____

ATTACHMENT A COMPLAINT REPORT AND RESOLUTION FORM

(ATTACH ADDITIONAL PAGES AND ALL SUPPORTING PHOTO/DOCUMENTATION, AS REQUIRED)