DOCKETED

Docket Number:	12-AFC-02C
Project Title:	Huntington Beach Energy Project - Compliance
TN #:	216248
Document Title:	Redlined Conditions of Certification for the Presiding Member's Proposed Decision
Description:	PMPD filed February 24, 2017
Filer:	Susan Cochran
Organization:	Energy Commission Hearing Office
Submitter Role:	Committee
Submission Date:	2/24/2017 4:59:41 PM
Docketed Date:	2/24/2017

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

PETITION TO AMEND THE:

HUNTINGTON BEACH ENERGY PROJECT

Docket No. 12-AFC-02C

REDLINED CONDITIONS OF CERTIFICATION FOR THE PRESIDING MEMBER'S PROPOSED DECISION

On February 24, 2017, the Committee[1] appointed by the Energy Commission to conduct proceedings on the Petition to Amend the Huntington Beach Energy Project (Amended Project) issued the Presiding Member's Proposed Decision (PMPD). The PMPD includes conditions of certification to ensure that the Amended Project is designed, constructed, and operated in compliance with all applicable laws, ordinances, regulations, and standards and does not result in any unmitigated direct, idirect, or cumulative environmental impacts.

Because the Amended Project was reviewed against the Energy Commission's prior decision on the Huntington Beach Energy Project (2014 Project). As such, many of the conditions of certification for the Amended Project are modified versions of the 2014 Project's conditions of certification. We created the attached version of the conditions of certification is for the ease of reviewers of the PMPD. In the event of any conflict between this version of the conditions of certification and those contained in the PMPD, the conditions of certification of the PMPD shall prevail.

Changes in the conditions of certification from the 2014 Project are shown in ~~strikethrough~~ for deleted text and **bold underline** for new text

[1] The Committee consists of Commissioner J. Andrew McAllister, Presiding Member, and Commissioner Karen Douglas, Associate Member. The full Commission made this Committee assignment at an Energy Commission Business Meeting on October 14, 2015.

AMENDED HUNTINGTON BEACH ENERGY PROJECT (12-AFC-02C)

CONDITIONS OF CERTIFICATION

DEFINITIONS

DEF-1 **DEFINITIONS**

The following terms and definitions apply to all of the Conditions of Certification in this Appendix "A", unless specifically stated otherwise.

1. Project Certification

Project certification occurs on the day the Energy Commission dockets its Decision.

2. Site Assessment and Pre-Construction Activities

Site assessment and pre-construction activities include the following, but only to the extent the activities are minimally disruptive to soil and vegetation and shall not affect listed or special-status species or other sensitive resources:

a) the installation of environmental monitoring equipment;

b) a minimally invasive soil or geological investigation;

c) a topographical survey;

d) any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility; and

e) any minimally invasive work to provide safe access to the site for any of the purposes specified in (a) - (d), above.

3. Site Mobilization and Construction

Site mobilization and construction activities are those necessary to provide site access for construction mobilization and facility installation, including both temporary and permanent equipment and structures, as determined by the CPM. Site mobilization and construction activities include, but are not limited to:

a) ground disturbance activities like grading, boring, trenching, leveling, mechanical clearing, grubbing, and scraping;

b) site preparation activities, such as access roads, temporary fencing, trailer and utility installation, construction equipment installation and

storage, equipment and supply laydown areas, borrow and fill sites, temporary parking facilities, and chemical spraying and controlled burns; and

c) permanent installation activities for all facility and linear structures, including access roads, fencing, utilities, parking facilities, equipment storage, mitigation and landscaping activities, and other installations, as applicable.

4. System Commissioning and Decommissioning

Commissioning activities are designed to test the functionality of a facility's installed components and systems to ensure safe and reliable operation. Although decommissioning is often synonymous with facility closure, specific decommissioning activities also systematically test the removal of such systems to ensure a facility's safe closure.

For compliance monitoring purposes, commissioning activities include interface connection and utility pre-testing, "cold" and "hot" electrical testing, system pressurization and optimization tests, grid synchronization, and combustion turbine "first fire." Decommissioning activity examples include utility shut down, system depressurization and de-electrification, structure removal, and site reclamation.

5. Start of Commercial Operation

For compliance monitoring purposes, "commercial operation" or "operation" begins once commissioning activities are complete, the certificate of occupancy has been issued, and the power plant has reached reliable steady-state electrical production. Operation activities can include a steady state of electrical production.

6. Non-Operation

Non-operation is time-limited and can encompass part or all of a facility. Non-operation can be a planned event, usually for minor equipment maintenance or repair, or unplanned, usually the result of unanticipated events or emergencies.

7. Closure

Closure is a facility shutdown with no intent to restart operation. It may also be the cumulative result of unsuccessful efforts to re-start over an increasingly lengthy period of non-operation, condemned by inadequate means and/or lack of a viable plan. Facility closures can occur due to a variety of factors, including, but not limited to, irreparable damage and/or functional or economic obsolescence.

8. Measurement

Whenever distance to an external point is used in these Conditions of Certification, it shall be measured from nearest point on the project fence line.

9. HBEP and AHBEP

Whenever the terms "HBEP" or "AHBEP" are used in these conditions, they shall refer to the Amended Project, unless the context clearly requires otherwise.

FACILITY DESIGN

GEN-1 The project owner shall design, construct, and inspect the project in accordance with this Decision and the 2013 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 Energy Commission's delegate chief building official 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, demolition, repair, or maintenance of the completed facility. All transmission facilities (lines, switchyards, switching stations and substations) are covered in the conditions of certification in the Transmission System Engineering section of this document.

In the event that the initial engineering designs are submitted to the CBO when the successor to the 2013 CBSC is in effect, the 2013 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.

Verification: 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, including the architectural visual enhancement specified in the Visual Resources section. 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.

Verification: 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, equipment, and the architectural enhancement features 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 for design review, plan checks, and construction inspections, based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. These fees may be consistent with the fees listed in the 2013 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.

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

GEN-4 Prior to the start of rough grading, the project owner shall assign a California-registered architect, or a structural or civil engineer, as the resident engineer (RE) in charge of the project. All transmission facilities (lines, switchyards, switching stations, and substations) are addressed in the conditions of certification in the Transmission System Engineering section of this document.

The RE may delegate responsibility for portions of the project to other registered engineers. Registered mechanical and electrical engineers may be delegated responsibility for mechanical and electrical portions of the project, respectively. A project may be divided into parts, provided 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.

7. Include the results of any dewatering mitigation measures identified during the scope of the study conducted pursuant to Condition of Certification **GEO-1**.

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.

Verification: 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 section 6704 et seq., and sections 6730, 6731 and 6736 require state registration to practice as a civil engineer or structural engineer in California). All transmission facilities (lines, switchyards, switching stations, and substations) are handled in the conditions of certification in the Transmission System Engineering section of this document.

The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (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 2013 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.

5. 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 2013 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;

3. Monitor construction progress to ensure compliance with engineering LORS;

4. Evaluate and recommend necessary changes in design; and

5. Prepare and sign all major building plans, specifications, and calculations.

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.

Verification: 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 2013 CBC. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in conditions of certification in the Transmission System Engineering section of this document.

A 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.

Verification: 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 conditions of certification and, if appropriate, applicable sections of the CBC and/or other LORS.

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

GEN-8 The project owner shall obtain the CBO's final approval of all completed work that has undergone CBO design review and approval. The project

owner shall request the CBO to inspect the completed structure and review the submitted documents. 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-builts 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.

GEN-9: NO SHORELINE PROTECTIVE DEVICE.

In the event that the approved development, including any future improvements, is threatened with damage or destruction from coastal hazards, or is damaged or destroyed by coastal hazards, protective structures (including but not limited to seawalls, revetments, groins, deep piers/caissons etc.) shall be prohibited. By acceptance of the CEC approval, the project owner waives any right to construct such protective structures, including any that may exist under Public Resources Code Section 30235.

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 2013 CBC.

Verification: 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.

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

CIVIL-3 The project owner shall perform inspections in accordance with the 2013 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.

Verification: Within five days of the discovery of any discrepancies, the resident engineer shall transmit to the CBO and the CPM a non-conformance report (NCR), and the proposed corrective action, for review and approval. Within five days of resolution of the NCR, the project owner shall submit the details of the corrective action to the CBO and the CPM. A list of NCRs for the reporting month shall also be included in the following monthly compliance report.

CIVIL-4 After completion of finished grading and erosion and sedimentation control and drainage 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.

Verification: At least 60 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:

1. Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);

2. Concrete pour sign-off sheets;

3. Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);

4. Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing 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 2013 CBC.

Verification: If a discrepancy is discovered in any of the above data, the project owner shall, within five days, prepare and submit an NCR describing the nature of the discrepancies and the proposed corrective action to the CBO, with a copy of the transmittal letter to the CPM. The NCR shall reference the condition(s) of certification and the applicable CBC chapter and section. Within five days of resolution of the NCR, the project owner shall submit a copy of the corrective action to the CBO and the CPM.

The project owner shall transmit a copy of the CBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall

advise the CPM, within five days, the reason for disapproval, and the revised corrective action to obtain CBO's approval.

STRUC-3 The project owner shall submit to the CBO design changes to the final plans required by the 2013 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.

Verification: On a schedule suitable to the CBO, the project owner shall notify the CBO of the intended filing of design changes, and shall submit the required number of sets of revised drawings and the required number of copies of the other above-mentioned documents to the CBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the monthly compliance report, when the CBO has approved the revised plans.

STRUC-4 Tanks and vessels containing quantities of toxic or hazardous materials exceeding amounts specified in the 2013 CBC shall, at a minimum, be designed to comply with the requirements of that chapter.

Verification: 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 following monthly compliance report. The project owner shall also transmit a copy of the CBO's inspection approvals to the CPM in the monthly compliance report following completion of any inspection.

MECH-1 The project owner shall submit, for CBO design review and approval, the proposed final design, specifications and calculations for each plant major piping and plumbing system listed in the CBO-approved master drawing and master specifications list. The submittal shall also include the applicable QA/QC procedures. Upon completion of construction of any such major piping or plumbing system, the project owner shall request the CBO's inspection approval of 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);
- Title 24, California Code of Regulations, Part 2 (California Building Code); and
- City of Huntington Beach codes.

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

Verification: 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:

1. Ensure that all boilers and fired and unfired pressure vessels are designed, fabricated, and installed in accordance with the appropriate section of the ASME Boiler and Pressure Vessel Code, or other applicable code. Vendor certification, with identification of applicable code, shall be submitted for prefabricated vessels and tanks; and

2. Have the responsible design engineer submit a statement to the CBO that the proposed final design plans, specifications, and calculations conform to all of the requirements set forth in the appropriate ASME Boiler and Pressure Vessel Code or other applicable codes.

Verification: At least 30 days (or project owner- and CBO-approved alternative 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. All transmission facilities (lines, switchyards, switching stations, and substations) are handled in conditions of certification in the Transmission System Engineering section of this document.

A. Final plant design plans shall include:

1. One-line diagram for the 13.8 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;

5. Coordination study calculations for fuses, circuit breakers, and protective relay settings for the 13.8 kV, 4.16 kV and 480 V systems;

6. System grounding requirements;

7. Lighting energy calculations; and

8. 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 energization of major electrical equipment; and

3. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the Energy Commission decision.

Verification: At least 30 days (or project owner- and CBO-approved alternative 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.

TRANSMISSION SYSTEM ENGINEERING

TSE-1 The project owner shall furnish to the CPM and to the 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.

Table 1: Major Equipment List

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

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.

Verification: 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 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 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.

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) Special Protection System (SPS) sequencing and timing if applicable,

ii) A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation for which the project is responsible, are acceptable,

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

Verification: Prior to the start of construction or 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 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"1 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 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 engineering description of the equipment and configurations covered by requirements TSE-3 a) through f);

d) Special Protection System (SPS) sequencing and timing, if applicable, shall be provided concurrently to the CPM.

e) A letter stating that the mitigation measures or projects selected by the transmission owners for each reliability criteria violation for which the project is responsible, are acceptable,

f) A copy of the executed LGIA signed by the California ISO 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.

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

TSE-4 The project owner shall provide the following Notice to the 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.

Verification: 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 GO-95 or NESC, Title 8, CCR, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", applicable interconnection standards, 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.

Verification: 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 or NESC, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the "High Voltage Electric Safety Orders", and applicable interconnection standards, NEC, related industry standards.

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.

TRANSMISSION LINE SAFETY AND NUISANCE

TLSN-1 The project owner shall construct the proposed 230-kV generator tie transmission line according to all applicable laws, ordinances, regulations, and industry standards, including the National Electric Safety Code (NESC) the requirements of California Public Utility Commission's GO-95 , 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 Design Reduction Guidelines for Electrical Facilities.

VERIFICATION: At least 30 days prior to start of construction of the generator tie 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 lines will be constructed according to the requirements stated in the condition.

TLSN-2 The project owner shall measure the maximum strengths of the line electric and magnetic fields at the edge of the right-of-way to validate the estimates the applicant has provided for these fields. These measurements shall be made (a) according to the standard procedures of the American National Standard Institute/Institute of Electrical and Electronic Engineers (ANSI/IEE) and, (b) before and after energization. The measurements shall be completed no later than six months after the start of operations.

VERIFICATION: The project owner shall file copies of the pre-and post-energization measurements with the CPM within 60 days after completion of the measurements. The CPM shall determine the need for further mitigation from these field measurements.

TLSN-3 The project owner shall ensure that the route of the proposed transmission line is kept free of combustible material, as required under the provisions of GO-95 and California Code of Regulations, title 14, section 1250.

Verification: During the first five (5) years of plant operation, the project owner shall provide a summary of inspection results and any fire prevention activities carried out along the proposed route and provide such summaries in the Annual Compliance Report on transmission line safety and nuisance-related requirements.

TLSN-4 The project owner shall ensure that all permanent metallic objects within the proposed route are grounded according to industry standards.

Verification: At least 30 days before the lines are energized, the project owner shall transmit to the CPM a letter confirming compliance with this condition.

AIR QUALITY

AQ-SC1 Air Quality Construction**/Demolition** Mitigation Manager (AQCMM)

The project owner shall designate and **have during construction/demolition activities** ~~retain~~ an ~~on-site~~ AQCMM who shall be responsible for directing and documenting compliance with Conditions **AQ-SC3, AQ-SC4** and **AQ-SC5** for the entire duration of project site construction**/demolition. The project owner may elect to assign one or more AQCMMs as well.**. 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**/demolition** on the project site, and shall have the authority to stop any or all construction**/demolition** activities as warranted by applicable construction**/demolition** mitigation conditions. The AQCMM and AQCMM delegates may have other responsibilities in addition to those described in this condition. ~~The AQCMM may be replaced only after compliance with the selection process outlined below. of the compliance project manager (CPM)~~.

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval the name, resume, qualifications, and contact information for the **first** on-site AQCMM and all AQCMM delegates. The AQCMM and all delegates must be approved by the CPM before the start of ground disturbance. **An AQCMM may be replaced after ground disturbance if the replacement AQCMM has been approved by the CPM.**

AQ-SC2 Air Quality Construction Mitigation Plan (AQCMP)

The project owner shall provide, for approval, an AQCMP that details the steps to be taken and the reporting requirements necessary to ensure compliance with Conditions of Certification **AQ-SC3**, **AQ-SC4** and **AQ-SC5**.

Verification: At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the CPM for approval. The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The AQCMP must be approved by the CPM before the start of ground disturbance.

AQ-SC3 Construction Fugitive Dust Control

Project owner shall implement the following control measures to mitigate for any increases in regional criteria pollutants during construction, including fugitive dust.

The AQCMM shall submit documentation to the CPM in each monthly compliance report (MCR) that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation measures for purposes of minimizing fugitive dust emission creation from construction activities and preventing all fugitive dust plumes from leaving the project's boundary. The following fugitive dust mitigation measures shall be included in the AQCMP

required by **AQ-SC2**, and any deviation from the AQCMP mitigation measures shall require prior CPM notification and approval.

A. The main access roads through the facility to the power block areas will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction in the main power block area, and delivery areas for operations materials (chemical, replacement parts, etc.) will be paved prior to taking initial deliveries.

B. All unpaved construction roads and unpaved operation site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be both as efficient or more efficient for fugitive dust control as ARB approved soil stabilizers, and shall not increase any other environmental impacts including loss of vegetation to areas beyond where the soil stabilizers are being applied for dust control. All other disturbed areas in the project construction site shall be watered as frequently as necessary during grading; and after active construction activities shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods, in order 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.

C. No vehicle shall exceed 10 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.

D. The construction site entrances shall be posted with visible speed limit signs.

E. Wheel washers shall be installed for all exiting trucks and equipment, or wheels shall be inspected and washed (as necessary) to remove accumulated dirt prior to leaving the site.

F. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.

G. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.

H. 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.

I. Sandbags or other erosion control measures shall be installed consistent with the requirements of the Storm Water Pollution Prevention Plan (SWPPP).

J. All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.

K. At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads en route from the construction site or construction staging areas shall be swept as needed (less during periods of precipitation) on days when construction activity occurs or on any other day when dirt or run-off resulting from the construction site activities is visible on the public paved roadways. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.

L. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered or treated with appropriate dust suppressant compounds.

M. When bulk materials are transported offsite, all materials that have the potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least two feet of freeboard.

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

Verification: The AQCMM shall provide the CPM a Monthly Compliance Report to include the following to demonstrate control of fugitive dust emissions:

A. A summary of all actions taken to maintain compliance with this condition; and

B. Copies of any air quality-related complaints filed with the air district or facility representatives in relation to project construction; and

C. 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-SC4 Dust Plume Response Requirement

The AQCMM or an AQCMM delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes that have the potential to be transported off the project site and within 400 feet upwind of any regularly occupied structures not owned by the project

owner indicates that existing mitigation measures are not resulting in effective mitigation. The AQCMP shall include a section detailing how the additional mitigation measures will be accomplished within the time limits specified. The AQCMM or delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

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 activity. 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 the CPM a Monthly Compliance Report to include:

A. A summary of all actions taken to maintain compliance with this condition;

B. Copies of any air quality-related complaints filed with the district or facility representatives in relation to project construction; and

C. 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-SC5 Diesel-Fueled Engine Control

The AQCMM shall submit to the CPM, in the Monthly Compliance Report, a table that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling diesel construction-related combustion emissions. Any deviation from the AQCMP mitigation measures requires prior CPM notification and approval.

All off-road diesel construction equipment used in the construction of this facility shall be powered by the cleanest engines available that also comply with the California Air Resources Board's (ARB's) Regulation for In-Use Off-Road Diesel Fleets and shall be included in the Air Quality

Construction Mitigation Plan (AQCMP) required by **AQ-SC2**. The AQCMP measures shall include the following, with the lowest-emitting engine chosen in each case, as available:

A. All off-road vehicles with compression ignition engines shall comply with the California Air Resources Board's (ARB's) Regulation for In-Use Off-Road Diesel Fleets (California Code of Regulation Title 13, Article 4.8, Chapter 9, §2449 et. seq.).

B. To meet the highest level of emissions reduction available for the engine family of the equipment, each piece of diesel-powered equipment shall be powered by a Tier 4 engine (without add-on controls) or Tier 4i engine (without ad-on controls), or a Tier 3 engine with a post-combustion retrofit device verified by the ARB or the US EPA. For PM, the retrofit device shall be a particulate filter if verified, or a flow-through filter, or at least an oxidation catalyst. For NOx, the device shall meet the latest Mark level verified to be available.

C. For diesel powered equipment where the requirements of Part "b" cannot be met, the equipment shall be equipped with a Tier 3 engine without retrofit control devices or with a Tier 2 or lower Tier engine using retrofit controls verified by ARB or US EPA as the best available control device to reduce exhaust emissions of PM and nitrogen oxides (NOx) 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 can be considered "not practical" for the following, as well as other, reasons:

   1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or

   2. The use of the retrofit device would unduly restrict the vision of the operator such that the vehicle would be unsafe to operate because the device would impair the operator's vision to the front, sides, or rear of the vehicle, or

   3. The construction equipment is intended to be on site for 10 work days or less.

D. The CPM may grant relief from a requirement in Part "b" or "c" if the AQCMM can demonstrate a good faith effort to comply with the requirement and that compliance is not practical.

E. The use of a retrofit control device may be terminated immediately provided that the CPM is informed within 10 working days of the termination and a replacement for the equipment item in question meeting the level of control required occurs within 10 work days of termination of the use (if the equipment would be needed to continue

working at this site for more than 15 work days after the use of the retrofit control device is terminated) if 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 exhaust 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.

F. All equipment with engines meeting the requirements above shall be properly maintained and the engines tuned to the engine manufacturer's specifications. Each engine shall be in its original configuration and the equipment or engine must be replaced if it exceeds the manufacturer's approved oil consumption rate.

G. Construction equipment will employ electric motors when feasible.

H. If the requirements detailed above cannot be met, the AQCMM shall certify that a good faith effort was made to meet these requirements and this determination must be approved by the CPM.

I. All off-road 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.

Verification: The AQCMM shall include in the MCR the following to demonstrate control of diesel construction-related emissions:

A. A summary of all actions taken to control diesel construction related emissions;

B. A list of all heavy equipment used on site during that month, showing the tier level of each engine and the basis for alternative compliance with this condition for each engine not meeting Part "b" or Part "c" requirements. The list shall include the owner of the equipment and a letter from each owner indicating that the equipment has been properly maintained; and

C. 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 Construction Particulate Matter Mitigation Plan

The project owner shall prepare and implement a Construction Particulate Matter Mitigation Plan (CPMMP) that details the steps to be taken and the reporting requirements necessary to provide the equivalent of at least ~~8.26~~ **2.17** lbs/day PM10 and ~~0.79~~ **0.17** lbs/day PM2.5 of emissions reductions during the construction phase of the project. Construction emission reduction measures can include: localized street sweepers or programs; local ban of leaf blowing or blowers; sodding of local parks or playfields; fireplace or woodstove replacements; offsets or emission reduction credits; or other measures that can provide local emission reductions coincident with construction emissions.

Verification: At least 90 days prior to the start of any ground disturbance, the project owner shall submit the CPMMP to the CPM for review and approval. The CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt. The CPMMP must be approved by the CPM before the start of ground disturbance. During construction the project owner shall provide the records of the CPMMP in the Monthly Compliance Report.

AQ-SC7 Permit-to-Construct (PTC) and Permit-to-Operate (PTO)

The project owner shall provide the CPM copies of all district issued Permit-to-Construct (PTC) and Permit-to-Operate (PTO) documents for the facility. The project owner shall submit an amendment request 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.

Verification: The project owner shall submit any PTC, PTO, and proposed air permit modifications 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-SC8 Quarterly Operation Reports

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 note or highlight incidences of noncompliance.

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

AQ-SC9 The project owner shall provide emission reductions in the form of offsets or emission reduction credits (ERCs) in the quantities of at least 4 lbs/day of VOC and 5 lbs/day of PM10 emissions for the auxiliary boiler and 1 lb/day of VOC emissions for the oil/water separators. The project owner shall demonstrate that the reductions

are provided in the form required by the South Coast Air Quality Management District (District).

The project owner shall provide an ERC list and surrender the ERCs as required by the District. The project owner shall request CPM approval for any substitutions, modifications, or additions to the ERCs.

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, and that the requested change(s) will not cause the project to result in a significant environmental impact. The District must also confirm that each requested change is consistent with applicable federal and state laws and regulations.

Verification: The project owner shall submit to the CPM records showing that the project's offset requirements have been met prior to initiating construction. If the CPM approves a substitution or modification to the list of ERCs, the CPM shall file a statement of the approval with the project owner and Energy Commission docket. The CPM shall maintain an updated list of approved ERCs for the project.

AQ-SC10 The project owner shall comply with all staff (AQ-SC) and district (AQ) conditions of certification. The CPM, in consultation with the District, may approve any change to a condition of certification regarding air quality, as a staff approved modification, provided that: (1) the project remains in compliance with all applicable laws, ordinances, regulations, and standards, (2) the requested change clearly will not cause the project to result in a significant environmental impact, (3) no additional mitigation or offsets will be required as a result of the change, (4) no existing daily, quarterly, or annual permit limit will be exceeded as a result of the change, and (5) no increase in any daily, quarterly, or annual permit limit will be necessary as a result of the change.

Verification: The project owner shall submit a petition to amend for any proposed change to a condition of certification pursuant to this condition and shall provide the CPM with any additional information the CPM requests to substantiate the basis for approval.

DISTRICT ~~FINAL DETERMINATION OF COMPLIANCE~~ CONDITIONS

The following SCAQMD Conditions (**AQ-1** to **AQ-71~~43~~**) apply to **various units as identified where needed** ~~each unit of equipment and the proposed HBEP facility as a whole.~~

FACILITY CONDITIONS

AQ-1 The project owner shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
PM2.5	Less than 100 TONS IN ANY ONE YEAR

For purposes of demonstrating compliance with the 100 tons per year limit the project owner shall sum the PM2.5 emissions for each of the sources at this facility by calculating a 12 month rolling average as follows:

Using the calendar monthly fuel use data and following emission factors for each combined-cycle turbine PM2.5 = 3.94 lbs/mmcf., for each simple-cycle turbine PM2.5 = 7.43 lbs/mmcf, for the auxiliary boiler PM2.5 = 7.54 lbs/mmcf, for Boiler 1 PM2.5 = 1.86 lbs/mmcf, for Boiler 2 PM2.5 = 2.1 lbs/mmcf. For each emergency engine using the rated hp and the calendar monthly hourly usage data and the following emission factor PM2.5 = 0.38 gr/bhp-hr.

The project owner may apply to change the factors, via permit application, once a different value is demonstrated, subject to SCAQMD review of testing procedures and protocols.

The project owner shall submit written reports of the monthly PM2.5 compliance demonstrations required by this condition. The report submittal shall be included with the semi annual Title V report as required under Rule 3004(a)(4)(f). Records of the monthly PM2.5 compliance demonstrations shall be maintained on site for at least five years and made available upon SCAQMD request.

Verification: The project owner shall submit to the CPM and the District the facility annual operating and emissions data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Report (AQ-SC8).

AQ-2 This facility is subject to the applicable requirements of the following rules or regulation(s):

The facility shall submit a detailed retirement plan for the permanent shutdown of Huntington Beach (HB) Boilers 1 and 2 and Redondo Beach (RB) Boiler 7 describing in detail the steps and schedule that will be taken to render the boilers permanently inoperable. The retirement plan shall be submitted to SCAQMD within 60 days after the Permits to Construct are issued for gas turbines CCTG 1, CCTG 2, SCTG 1, and SCTG 2.

AES shall not commence any construction of HB Boilers 1 and 2 and RB Boiler 7 repowering project equipment including gas turbines

CCTG 1, CCTG 2, SCTG 1, SCTG 2, Auxiliary Boiler, ammonia storage tanks, or the oil water separators, unless the retirement plan is approved in writing by SCAQMD. If SCAQMD notifies AES that the plan is not approvable, AES shall submit a revised plan addressing SCAQMD's concerns within 30 days.

Within 30 calendar days of actual shutdown, or by no later than January 15, 2020, AES shall provide SCAQMD with a notarized statement that HB Boiler 1 and RB Boiler 7 are permanently shutdown and that any re start or operation of the units shall require new Permits to Construct and be subject to all requirements of non-attainment new source review and the prevention of significant deterioration program.

Within 30 calendar days of actual shutdown, or by no later than December 31, 2020, AES shall provide SCAQMD with a notarized statement that HB Boiler 2 is permanently shutdown and that any re start or operation of the unit shall require a new Permit to Construct and be subject to all requirements of non-attainment new source review and the prevention of significant deterioration program.

AES shall notify SCAQMD 30 days prior to the implementation of the approved retirement plan for permanent shutdown of HB Boiler 1 and RB Boiler 7, or advise SCAQMD as soon practicable should AES undertake permanent shutdown prior to January 15, 2020.

AES shall notify SCAQMD 30 days prior to the implementation of the approved retirement plan for permanent shutdown of HB Boiler 2, or advise SCAQMD as soon practicable should AES undertake permanent shutdown prior to December 31, 2020.

AES shall cease operation of HB Boiler 1 within 90 calendar days of the first fire of either CCTG 1 or CCTG 2, whichever is earlier. AES shall cease operation of HB Boiler 2 within 90 calendar days of the first fire of either SCTG 1 or SCTG 2, whichever is earlier. AES shall cease operation of RB Boiler 7 prior to the first fire of either CCTG 1 or CCTG 2, whichever is earlier.

At least 6 months prior to January 15, 2020, AES may submit a permit modification application requesting the permission to shutdown a combination of boilers other than HB Boiler 1, HB Boiler 2, and RB Boiler 7 to offset the increases for this project. The other boilers must be located at AES facilities Huntington Beach GS, Redondo Beach GS, or Alamitos GS, and approval of the application must be received prior to any changes being made to the shutdowns outlined in this condition.

Verification: The project owner shall submit the retirement plan and any modifications to the plan to the CPM within five working days of its submittal either by: 1) the project owner's submittal to District, or 2) receipt of proposed modifications from District. The project owner shall make site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-3 This facility is subject to the applicable requirements of the following rules or regulation(s):

For all circuit breakers at the facility utilizing SF6, the project owner shall install, operate, and maintain enclosed-pressure SF6 circuit breakers with a maximum annual leak rate of 0.5 percent by weight. The circuit breakers shall be equipped with a 10 percent by weight leak detection system. The leak detection system shall be calibrated in accordance with manufacturer's specifications. The manufacturer's specifications and all records of calibrations shall be maintained on site.

The total CO2e emissions from all circuit breakers shall not exceed 71.8 tons per calendar year.

The project owner shall calculate the SF6 emissions due to leakage from the circuit breakers by using the mass balance in equation DD-1 at 40 CFR Part 98, Subpart DD on an annual basis. Records of such calculations shall be maintained on site.

Verification: The project owner shall make site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-4 This facility is subject to the applicable requirements of the following rules or regulation(s):

Rule 1304.1 Electric Generating Fee for Use of Offset Exemption

The owner/operator shall submit the annual payment for PM10 and VOC, calculated in accordance with the rule and approved by the Executive Officer, on or before the anniversary date of the commencement of operation. The owner or operator may elect to switch to the single payment option upon submittal of a written request to the Executive Officer.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

DEVICE CONDITIONS

A. Emission Limits

AQ-5 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 3,090 LBS IN ANY ONE MONTH
CO	Less than or equal to 99,076 LBS IN ANY ONE MONTH
VOC	Less than or equal to 14,109 LBS IN ANY ONE MONTH

The above limits apply during commissioning. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 8.86 lbs/mmcf, PM10: 5.11 lbs/mmcf, and CO: 61.18 lbs/mmcf.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-6 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 6,324 LBS IN ANY ONE MONTH
CO	Less than or equal to 24,720 LBS IN ANY ONE MONTH
VOC	Less than or equal to 7,611 LBS IN ANY ONE MONTH

1. The above limits apply after the equipment is commissioned. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 2.66 lbs/mmcf, PM10: 3.94 lbs/mmcf.

The project owner shall calculate compliance with the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-7 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 4,643 LBS IN ANY ONE MONTH
CO	Less than or equal to 5,545 LBS IN ANY ONE MONTH
VOC	Less than or equal to 1,972 LBS IN ANY ONE MONTH

The above limits apply after the equipment is commissioned. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 2.74 lbs/mmcf, PM10: 7.43 lbs/mmcf.

The project owner shall calculate compliance with the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-8 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 1,747 LBS IN ANY ONE MONTH
CO	Less than or equal to 25,449 LBS IN ANY ONE MONTH
VOC	Less than or equal to 836 LBS IN ANY ONE MONTH

The above limits apply during commissioning. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 3.67 lbs/mmcf, PM10: 7.67 lbs/mmcf, and CO: 111.76 lbs/mmcf.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-9 The project owner shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 120 LBS IN ANY ONE MONTH
CO	Less than or equal to 650 LBS IN ANY ONE MONTH
VOC	Less than or equal to 87 LBS IN ANY ONE MONTH

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 5.47 lbs/mmcf, PM10: 7.54 lbs/mmcf, CO: 41.9 lbs/mmcf.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-10 The 16.66 LBS/MMSCF NOx emission limit(s) shall only apply during the first year of operation prior to CEMS certification for reporting NOx emissions.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-11 The 25.11 LBS/MMSCF NOx emission limit(s) shall only apply during the first year of operation prior to CEMS certification for reporting NOx emissions.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-12 The 2.0 PPMV NOx emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-13 The 1.5 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-14 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

The combined-cycle turbines and simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-15 The 1,000 LBS/MW-HR CO_2 emission limit(s) is averaged over a rolling 12 operating month basis. The limit shall only apply if the turbine supplies more than 1,519,500 MWh net electrical output to a utility

distribution system over a rolling 12 operating month basis and a 3 year rolling average basis.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-16 The 5.0 ppmv NH_3 emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry basis. The project owner shall calculate and continuously record the NH_3 slip concentration using the following:

NH3 (ppmv) = [a–b*(c*1.2)/1E+06]*1E+06/b

where,

a = NH3 injection rate (lbs/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 percent O2)

The project owner shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months. The NOx analyzer shall be installed and operated within 90 days of initial start-up.

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 project owner shall use the above described method or another alternative method approved by the Executive Officer.

The SCRs for the combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall include computed hourly ammonia slip concentrations as part of the Quarterly Operation Reports (AQ-SC8). Compliance with the ammonia slip limit shall be verified by the next scheduled ammonia source tests required in AQ-44 or AQ-45 or District approved alternative method.

AQ-17 The 2.5 PPMV NOx emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-18 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-19 The 5.0 PPMV NOx emission limit(s) is averaged over 60 minutes at 3 percent O_2, dry. This limit shall not apply during boiler start ups.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-20 The 50.0 PPMV CO emission limit(s) is averaged over 60 minutes at 3 percent O_2, dry. This limit shall not apply during boiler start ups.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-21 The 5.0 ppmv NH_3 emission limit(s) is averaged over 60 minutes at 3 percent O_2, dry basis. The operator shall calculate and continuously record the NH_3 slip concentration using the following:

NH3 (ppmv) = [a−b*(c*1.2)/1E+06]*1E+06/b

where,

a = NH3 injection rate (lbs/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 3 percent O2)

The project owner shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months. The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The project owner shall use the above described method or another alternative method approved by the Executive Officer.

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 SCR for the auxiliary boiler is subject to this condition.

Verification: The project owner shall include the computed hourly ammonia slip concentrations as part of the Quarterly Operation Reports (AQ-SC8). Compliance with the ammonia slip limit shall be verified by the next scheduled ammonia source tests required in AQ-45 or AQ-47 or District approved alternative method.

AQ-22 For the purpose of determining compliance with District Rule 475, combustion contaminants emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

B. Material/Fuel Type Limits

AQ-23 The project owner shall not use natural gas containing the following specified compounds:

Compound	grain per 100 scf
H_2S greater than	0.25

This concentration limit is an annual average based on monthly sample 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.

The combined-cycle turbines, the simple-cycle turbines, and the auxiliary boiler are subject to this condition.

Verification: The project owner shall submit fuel usage records and calculations required to demonstrate compliance with this condition as part of the Quarterly Operational Reports (AQ-SC8).

C. Throughput or Operating Parameter Limits

AQ-24 The project owner shall limit the number of start-ups to no more than 62 in any one calendar month.

The number of cold start ups shall not exceed 15 per month, the number of non-cold start ups shall not exceed 47 per month. Additionally, the number of cold start ups shall not exceed 80 per year, and the number of non-cold start ups shall not exceed 420 per year.

For the purposes of this condition: A cold start up is defined as a start up which occurs after the steam turbine has been shutdown for 48 hours or more. A cold start up shall not exceed 60 minutes. Emissions during the 60 minutes that includes a cold start up shall not exceed the following: NOx - 61 lbs., CO – 325 lbs., VOC – 36 lbs.

A non-cold start up is defined as a start up which occurs after the steam turbine has been shutdown for less than 48 hours. A non-cold start up shall not exceed 30 minutes. Emissions during the 30 minutes that includes a non-cold start up shall not exceed the following: NOx - 17 lbs., CO – 137 lbs., VOC – 25 lbs.

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

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-25 The project owner shall limit the number of shut-downs to no more than 62 in any one calendar month.

Additionally, the number of shutdowns shall not exceed 500 per year.

Shutdown time shall not exceed 30 minutes per shutdown. Emissions during the 30 minutes that includes a shutdown shall not exceed the following: NOx – 10 lbs., CO – 133 lbs., VOC – 32 lbs.

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-26 The project owner shall limit the operating time to no more than 6640 hour(s) in any one calendar year.

The limit includes baseload operation as well as start ups and shutdowns. The limit does not apply to the calendar year in which the units are commissioned.

Combined-Cycle Turbines No. 1 and No. 2 shall not simultaneously operate at minimum load for more than 20 consecutive hours (approximately 44 percent of full load rating).

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-27 The project owner shall limit the number of start-ups to no more than 62 in any one calendar month.

Additionally, the number of start ups shall not exceed 350 per year.

A start up shall not exceed 30 minutes. Emissions during the 30 minutes that includes a start up shall not exceed the following: NOx – 16.6 lbs., CO – 15.4 lbs., VOC – 2.8 lbs.

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

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-28 The project owner shall limit the number of shut-downs to no more than 62 in any one calendar month.

Additionally, the number of shutdowns shall not exceed 350 per year.

Shutdown time shall not exceed 13 minutes per shutdown. Emissions during the 13 minutes that includes a shutdown shall not exceed the following: NOx – 3.12 lbs., CO – 28.1 lbs., VOC – 3.06 lbs.

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-29 The project owner shall limit the operating time to no more than 2001 hour(s) in any one calendar year.

The limit includes baseload operation as well as start ups and shutdowns. The limit does not apply to the calendar year in which the units are commissioned.

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-30 The project owner shall limit the number of start-ups to no more than 10 in any one calendar month.

The number of cold start ups shall not exceed 2 per month, the number of warm start ups shall not exceed 4 per month, and the number of hot start ups shall not exceed 4 per month. Additionally, the number of cold start ups shall not exceed 24 per year, the number of warm start ups shall not exceed 48 per year, and the number of hot start ups shall not exceed 48 per year.

For the purposes of this condition: A cold start up is defined as a start up which occurs after the boiler shutdown for 48 hours or more. A cold start up shall not exceed 170 minutes. Emissions during the170 minutes that include a cold start up shall not exceed the following: NOx – 4.22 lbs., CO – 4.34 lbs., VOC – 1.05 lbs.

A warm start up is defined as a start up which occurs after the boiler has been shutdown for 9 – 48 hours. A warm start up shall not exceed 85 minutes. Emissions during the 85 minutes that includes a warm start up shall not exceed the following: NOx – 2.11 lbs., CO – 2.17 lbs., VOC – 0.52 lbs.

A hot start up is defined as a start up which occurs after the boiler has been shutdown for less than 9 hours. A hot start up shall not exceed 25 minutes. Emissions during the 25 minutes that includes a hot start up shall not exceed the following: NOx – 0.62 lbs., CO – 0.64 lbs., VOC – 0.15 lbs.

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

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-31 The project owner shall limit the heat input to no more than 189,155 MMBtu in any one calendar year.

The limit includes normal operation as well as start ups and shutdowns. The heat input shall be calculated using the fuel use data and a natural gas HHV of 1,050 btu/mmcf.

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit fuel usage records and calculations required to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-32 The project owner shall install and maintain a pressure relief valve set at 50 psig.

The ammonia storage tanks are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

D. Monitoring/Testing Requirements

AQ-33 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.

The project owner shall also install and maintain a device to continuously record the ammonia flow rate. Continuously record shall be defined as recording 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 injected ammonia rate shall be maintained within 44.0 lbs/hr and 242.0 lbs/hr except during start ups and shutdowns.

The SCRs for the combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-34 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 exhaust temperature. Continuously record shall be defined as recording 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 temp at the inlet of the SCR shall be maintained between 570-692 deg F except during start up and shutdowns.

The SCRs for the combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-35 The project owner shall install and maintain a(n) differential pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The project owner shall also install and maintain a device to continuously record the differential pressure. Continuous monitoring 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 differential pressure shall not exceed 1.6 inches WC.

The SCRs for the combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-36 The project owner shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the CO Catalyst.

The project owner shall also install and maintain a device to continuously record the exhaust temperature. Continuously record shall be defined as recording at least once every hour and shall be calculated based on 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 temp at the CO Catalyst inlet shall be maintained at a minimum of 570 deg F except during start up and shutdowns.

The CO Catalysts for the combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-37 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.

The project owner shall also install and maintain a device to continuously record the ammonia flow rate. Continuously record shall be defined as recording 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 injected ammonia rate shall be maintained within 110 lbs/hr and 180 lbs/hr except during start ups and shutdowns.

The SCRs for the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-38 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 exhaust temperature. Continuously record shall be defined as recording 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 temp at the inlet of the SCR shall be maintained between 500-870 deg F except during start up and shutdowns.

The SCRs for the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-39 The project owner shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The project owner shall also install and maintain a device to continuously record the differential pressure. Continuous monitoring 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 differential pressure shall not exceed 3.0 inches WC.

The SCRs for the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-40 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.

The project owner shall also install and maintain a device to continuously record the ammonia flow rate. Continuously record shall be defined as recording 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 injected ammonia rate shall be maintained within 1.0 lbs/hr and 3.9 lbs/hr except during start ups and shutdowns.

The SCR for the auxiliary boiler is subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-41 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 exhaust temperature. Continuously record shall be defined as recording 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 shall be maintained between 406-636 deg F except during start ups and shutdowns.

The SCR for the auxiliary boiler is subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-42 The project owner shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The project owner shall also install and maintain a device to continuously record the differential pressure. Continuous monitoring 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 differential pressure shall not exceed 2.0 inches WC.

The SCR for the auxiliary boiler is subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-43 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the CO Catalyst.

The operator shall also install and maintain a device to continuously record the exhaust temperature. Continuously record shall be defined as recording at least once every hour and shall be calculated based on 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 temp at the CO Catalyst inlet shall be maintained at a minimum of 500 deg F except during start up and shutdowns.

The CO Catalysts for the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-44 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 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted after SCAQMD approval of the source test protocol, but no later than 180 days after initial start-up. 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 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 net and MW gross.

The test shall be conducted in accordance with an SCAQMD approved test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 45 days before the proposed test date and shall be approved by the SCAQMD 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 test shall be conducted when this equipment is operating at 3 load conditions, including within 5 percent of maximum, within 5 percent of minimum, and one intermediate load.

For natural gas fired turbines only, for the purpose of demonstrating compliance with BACT 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 ROG 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, ARB, and SCAQMD.

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit the proposed protocol for the initial 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 source test results no later than 60 days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.

AQ-45 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
NH_3 emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	Outlet of the SCR serving this equipment

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 CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, 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.

The combined-cycle turbines, the simple-cycle turbines, and the auxiliary boiler are subject to this condition.

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-46 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	District 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 shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the SCAQMD 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 when this equipment is operating at 100 percent of maximum heat input.

For natural gas fired turbines only, for the purpose of demonstrating compliance with BACT 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 ROG 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, ARB, and SCAQMD.

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-47 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
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5.1	District-	Outlet of the

		approved averaging time	SCR serving this equipment
NH_3 emissions	District Method 207.1 and 5.3 or EPA Method 17	1 hour	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

The test shall be conducted after SCAQMD approval of the source test protocol, but no later than 180 days after initial start-up. 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 when this equipment is operating at 100 percent, 50 percent, and minimum load.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), and the flue gas flow rate.

The test shall be conducted in accordance with an SCAQMD approved test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 45 days before the proposed test date and shall be approved by the SCAQMD before the test commences.

The test protocol shall include the proposed operating conditions of the boiler 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 auxiliary boiler is subject to this condition.

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-48 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
CO emissions	District Method 100.1	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted at least once every three years, or in accordance with the schedule specified in Rule 1146.

The test shall be conducted and the results submitted to the SCAQMD 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 when this equipment is operating at 100 percent of maximum load.

In addition to the Method 100.1 test, the project owner shall also perform periodic CO emissions tests on the boiler with a portable analyzer in accordance with the schedule and specifications outlined in Rule 1146.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-49 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. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, in accordance with approved SCAQMD Rule 218 CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

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

The CEMS shall convert the actual CO concentrations to mass emission rates (lbs/hr) using the equation below 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)/10E6], where

1. K = 7.267*10-8 (lbs/scf)/ppm

2. Cco = Average of 4 consecutive 15 min. average CO concentrations, ppm

3. Fd = 8710 dscf/MMBTU natural gas

4. %O2, d = Hourly average % by volume O2 dry, corresponding to Cco

5. Qg = Fuel gas usage during the hour, scf/hr

6. HHV = Gross high heating value of the fuel gas, BTU/scf

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-50 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. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, in accordance with approved SCAQMD REG XX CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

Rule 2012 provisional RATA 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 initial start up and the provisional certification date of the CEMS, the operator shall comply with the requirements of Rule 2012(h)(2) and 2012(h)(3).

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-51 The project owner shall install and maintain a CEMS to measure the following parameters:

NOx concentration in ppmv

Concentrations shall be corrected to 3 percent oxygen on a dry basis. The CEMS shall be installed and operating no later than 90 days after initial startup of the boiler, in accordance with approved SCAQMD REG XX CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

Rule 2012 provisional RATA testing shall be completed and submitted to the SCAQMD within 90 days of the conclusion of the combined-cycle turbine commissioning and boiler construction period. During the interim period between the initial start up and the provisional certification date of the CEMS, the project owner shall comply with the requirements of Rule 2012(h)(2) and 2012(h)(3).

The auxiliary boiler is subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

E. Equipment Operation/Construction Requirements

AQ-52 The project owner shall vent this equipment, during filling, only to the vessel from which it is being filled.

The ammonia storage tanks are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-53 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 operator has notified the Executive Officer prior to the operation of the equipment.

Construction of Phase 1 of the project (defined as the combined-cycle turbines and associated control equipment, the auxiliary boiler and associated control equipment, storage tank D150, and oil water separator D152) shall commence within 18 months from the date of the Permit to Construct, unless an extension is granted by the permitting authority.

Construction of Phase 2 of the project (defined as the simple-cycle turbines and associated control equipment, storage tank D151, and oil water separator D153) shall commence within 18 months of June 30, 2022 unless an extension is granted by the permitting authority.

Construction shall not be discontinued for a period of 18 months or more at any time during Phase 1 or Phase 2.

The combined-cycle turbines, the simple-cycle turbines, the auxiliary boiler and their corresponding SCRs, CO Catalysts, and ammonia storage tanks are subject to this condition.

Verification: The project owner shall submit any permit extension granted by the permitting authority to the CPM within 15 days of receipt. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-54 The project owner shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 12-AFC-02C project.

The combined-cycle turbines, the simple-cycle turbines, the auxiliary boiler and their corresponding SCRs, CO Catalysts, and ammonia storage tanks are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-55 The project owner shall install this equipment according to the following requirements:

Total commissioning hours shall not exceed 996 hours of operation for each turbine from the date of initial turbine start up. Total commissioning hours without control shall not exceed 216 hours of operation for each turbine.

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

The project owner shall provide SCAQMD with written notification of the initial start up date. Written records of commissioning, start ups, and shutdowns shall be maintained and be made available upon request from SCAQMD.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall submit records to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-56 The project owner shall upon completion of construction, operate and maintain this equipment according to the following specifications:

The project owner shall record the total net power generated in a calendar month in megawatt-hours.

The project owner shall calculate and record greenhouse gas emissions for each calendar month using the following formula:

$CO_2 = 60.009 * FF$

Where, CO_2 is in tons and FF is the monthly fuel usage in millions standard cubic feet.

The project owner shall calculate and record the CO_2 emissions in pounds per net megawatt-hour on a 12-month rolling average. The CO_2

emissions from this equipment shall not exceed 873,035 tons per year per turbine on a 12-month rolling average basis. The calendar annual average CO2 emissions shall not exceed 967.6 pounds per net MW-hour.

The project owner shall maintain records in a manner approved by the SCAQMD to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-57 The project owner shall install this equipment according to the following requirements:

Total commissioning hours shall not exceed 280 hours of operation for each turbine from the date of initial turbine start up. Total commissioning hours without control shall not exceed 4 hours of operation for each turbine.

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

The project owner shall provide SCAQMD with written notification of the initial start up date. Written records of commissioning, start ups, and shutdowns shall be maintained and be made available upon request from SCAQMD.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit records to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8).

AQ-58 The project owner shall upon completion of construction, operate and maintain this equipment according to the following specifications:

The project owner shall record the total net power generated in a calendar month in megawatt-hours.

The project owner shall calculate and record greenhouse gas emissions for each calendar month using the following formula:

CO2 = 60.009 * FF

Where, CO2 is in tons and FF is the monthly fuel usage in millions standard cubic feet.

The project owner shall calculate and record the CO2 emissions in pounds per net megawatt-hour on a 12-month rolling average. The CO2 emissions from this equipment shall not exceed 103,576 tons per year per turbine on a 12-month rolling average basis. The calendar annual average CO2 emissions shall not exceed 1378.0 pounds per net MW-hour.

The project owner shall maintain records in a manner approved by the SCAQMD to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-59 The project owner shall comply with the following requirements:

The total electricity output on a gross basis from combined-cycle turbines devices D115 and D124, and their common steam turbine shall not exceed 693.8 MW.

The gross electrical output shall be measured at the single generator serving each of the combined-cycle turbines, and the single generator serving the common steam turbine. The monitoring equipment shall meet ANSI Standard No. C12 or equivalent, and have an accuracy of +/- 0.2 percent. The gross electrical output from the generators shall be recorded at the CEMS DAS over a 15 minute averaging time period.

The project owner shall record and maintain written records of the maximum amount of electricity produced from this equipment 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 combined-cycle turbines are subject to this condition.

Verification: The project owner shall report the maximum gross megawatts generated monthly to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-60 The project owner shall comply with the following requirements:

The total electricity output on a gross basis from simple-cycle turbines devices D133 and D139 shall not exceed 201.6 MW.

The gross electrical output shall be measured at the single generator serving each of the simple-cycle turbines. The monitoring equipment

shall meet ANSI Standard No. C12 or equivalent, and have an accuracy of +/- 0.2 percent. The gross electrical output from the generators shall be recorded at the CEMS DAS over a 15 minute averaging time period.

The project owner shall record and maintain written records of the maximum amount of electricity produced from this equipment 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 simple-cycle turbines are subject to this condition.

Verification: The project owner shall report the maximum gross megawatts generated monthly to demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-61 The project owner shall comply with the following requirements:

This equipment shall not supply more than 43 percent of its potential electrical output or more than 376,200 MWh net electrical output to a utility distribution system on a 12 operating month rolling average and a 3 year rolling average basis

The project owner shall record and maintain written records of the amount of electricity supplied to the utility distribution system expressed as a percentage of the total potential electrical output of the turbine and shall make the records available to the Executive Officer upon request.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall demonstrate compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

I. Administrative

AQ-62 This equipment shall not be operated unless the facility holds 147,093 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

AQ-63 This equipment shall not be operated unless the facility holds 26,970 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

AQ-64 This equipment shall not be operated unless the facility holds 1,313 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

AQ-65 This equipment shall not be operated unless the facility holds 14,803 pounds of SOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 9,960 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any

other amount of RTCs required to be held under other condition(s) stated in this permit.

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

AQ-66 This equipment shall not be operated unless the facility holds 1,660 pounds of SOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 1,201 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

AQ-67 This equipment shall not be operated unless the facility holds 382 pounds of SOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 382 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (AQ-SC8).

K. Record Keeping/Reporting

AQ-68 The project owner shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source tests required under conditions AQ-44, AQ-45, and AQ-46 are conducted.

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

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. 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, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

The combined-cycle turbines and the simple-cycle turbines are subject to this condition.

Verification: The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-69 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source tests required under conditions AQ-45, AQ-47, and AQ-48 are conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 3 percent oxygen (dry basis), mass rate (lb/hr), and lb/MMCF. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains/DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. All moisture concentration shall be expressed in terms of percent corrected to 3 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), and the flue gas temperature under which the test was conducted.

The auxiliary boiler is subject to this condition.

Verification: The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-70 The project owner shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Commissioning hours and type of control and fuel use

Date, time, and duration of each start-up and shutdown, and the type of start up (cold or non-cold)

In addition to the requirements of a certified CEMS, natural gas fuel use records shall be kept during and after the commissioning period and prior to CEMS certification

Minute by minute data (NO2 and O2 concentration and fuel flow rate at a minimum) for each turbine start up and shutdown

Total annual power output in MWh

The combined-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-71 The operator shall keep records in a manner approved by the District, for the following parameter(s) or item(s):

Commissioning hours and type of control and fuel use

Date, time, and duration of each start-up and shutdown

In addition to the requirements of a certified CEMS, natural gas fuel use records shall be kept during and after the commissioning period and prior to CEMS certification

Minute by minute data (NO2 and O2 concentration and fuel flow rate at a minimum) for each turbine start up

Total annual power output in MWh

The simple-cycle turbines are subject to this condition.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

~~**AQ-1** The project owner shall limit emissions from this facility as follows:~~

~~CONTAMINANT~~	~~EMISSIONS LIMIT~~

PM	Less than 100 TONS IN ANY ONE YEAR

For purposes of this condition, the PM shall be defined as particulate matter with aerodynamic diameter of 2.5 microns or less.

For purposes of demonstrating compliance with the 100 tons per year limit the project owner shall sum the PM2.5 emissions for each of the major sources at this facility by calculating a 12-month rolling average using the calendar monthly fuel use data and following emission factors for each turbine PM2.5 = 3.36 lbs/mmcf with no duct firing and PM2.5 = 5.22 lbs/mmcf with duct firing, for Boiler 1 PM2.5 = 1.86 lbs/mmscf, for Boiler 2 PM2.5 = 2.1 lbs/mmscf.

The project owner may apply to change the factors, via permit application, once a different value is demonstrated, subject to SCAQMD review of testing procedures and protocols.

The project owner shall submit written reports of the monthly PM2.5 compliance demonstrations required by this condition. The report submittal shall be included with the semiannual Title V report as required under Rule 3004(a)(4)(f). Records of the monthly PM2.5 compliance demonstrations shall be maintained on site for at least five years and made available upon SCAQMD request.

[Rule 1325, 40CFR 51, Appendix S]

Verification: The project owner shall submit to the CPM and the District the facility annual operating and emissions data demonstrating compliance with this condition as part of the fourth quarter's Quarterly Operation Report (**AQ-SC8**).

AQ-2 This facility is subject to the applicable requirements of the following rules or regulations:

The facility shall submit a detailed retirement plan for the permanent shutdown of Huntington Beach (HB) Boilers 1 and 2 and Redondo Beach (RB) Boilers 6 and 8 describing in detail the steps and schedule that will be taken to render the boilers permanently inoperable. The retirement plan shall be submitted to SCAQMD within 60 days after the Permits to Construct for gas turbine Units 1A, 1B, 1C, 2A, 2B, and 2C are issued.

The retirement plan must be approved in writing by SCAQMD. AES shall not commence any construction of HB Boilers 1 and 2 and RB Boilers 6 and 8 repowering project equipment including gas turbines 1A, 1B, 1C, 2A, 2B, 2C, steam turbines 1 and 2, SCR/CO catalysts for gas turbines 1A, 1B, 1C, 2A, 2B, and 2C, or the oil water separator, before the retirement plan is approved in writing by SCAQMD. If SCAQMD notifies AES that the plan is not approvable, AES shall submit a revised plan addressing SCAQMD's concerns within 30 days.

Within 30 calendar days of actual shutdown, or by no later than December 31, 2018, AES shall provide SCAQMD with a notarized statement that HB Beach Boilers 1 and 2 and RB Boilers 6 and 8 are permanently shut down and that any restart or operation of the units shall require new Permits to Construct and be subject to all requirements of non-attainment new source review and the prevention of significant deterioration program.

AES shall notify SCAQMD 30 days prior to the implementation of the approved retirement plan for permanent shutdown of HB Boilers 1 and 2 and RB Boilers 6 and 8, or advise SCAQMD as soon practicable should AES undertake permanent shutdown prior to December 31, 2018.

AES shall cease operation of RB Boilers 6 and 8 within 90 calendar days of the first fire of Units 1A, 1B, or 1C, and AES shall cease operation of HB Boilers 1 and 2 within 90 calendar days of the first fire of Units 2A, 2B, or 2C.

Rule 1304 – Modeling and Offset Exemption]

Verification: The project owner shall submit the retirement plan and any modifications to the plan to the CPM within five working days of its submittal either by: 1) the project owner to district, or 2) receipt of proposed modifications from district. The project owner shall make site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-3 This facility is subject to the applicable requirements of the following rules or regulations:

For all circuit breakers at the facility utilizing SF_6, the project owner shall install, operate, and maintain enclosed-pressure SF_6 circuit breakers with a maximum annual leak rate of 0.5 percent by weight. The circuit breakers shall be equipped with a 10 percent by weight leak detection system. The leak detection system shall be calibrated in accordance with manufacturer's specifications. The manufacturer's specifications and all records of calibrations shall be maintained on site.

The total CO2e emissions from all circuit breakers shall not exceed 6.8 tons per calendar year.

[Rule 1714]

Verification: The project owner shall make site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

EACH GAS TURBINE

AQ-4 The project owner shall limit emission from this equipment as follows:

CONTAMINANT	EMISSION LIMIT
PM10	4,278.0 LBS IN ANY ONE MONTH
CO	12,776.2 LBS IN ANY ONE MONTH
VOC	7,487.2 LBS IN ANY ONE MONTH

The above limits apply after the equipment is commissioned. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 2.94 lbs/mmcf, PM10: 3.36 lbs/mmcf with no duct burner firing, 5.22 lbs/mmcf with duct burner firing.

The project owner may apply to change the factors, via permit application, once a different value is demonstrated, subject to SCAQMD review of testing procedures and protocols.

The project owner shall calculate compliance with the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS.

The project owner shall limit the annual firing hours for each turbine to 6370 hours including no more than 470 hours with duct firing (this does not include start up and shutdown hours)

[Rule 1303 – Offsets]

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-5 The project owner shall limit emission from this equipment as follows:

CONTAMINANT	EMISSION LIMIT
PM10	2,930 LBS IN ANY ONE MONTH
CO	112,882 LBS IN ANY ONE MONTH
VOC	14,121 LBS IN ANY ONE MONTH

The above limits apply during commissioning. The above limits apply to each turbine.

The project owner shall calculate compliance with the emission limit(s) by using fuel use data and the following emission factors: VOC: 21.74 lbs/mmcf, PM10: 4.51 lbs/mmcf, and CO: 173.80 lbs/mmcf.

Verification: The project owner shall provide emissions summary data in compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-6 The 12.75 LBS/MMCF NOx emission limits shall only apply during turbine operation prior to CEMS certification for reporting NOx emissions.

[Rule 2012]

Verification: The project owner shall demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**).

AQ-7 The 2.0 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

[Rule 1703-PSD, Rule 2005]

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**).

AQ-8 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

[Rule 1703-PSD]

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**).

AQ-9 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O_2, dry. This limit shall not apply during commissioning, turbine start ups and turbine shutdowns.

[Rule 1303(a) – BACT, Rule 1303(b)(1) – Modeling, Rule 1303(b)(2) - Offsets]

Verification: The project owner shall submit CEMS records demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**).

AQ-10 The 1100 lbs/net MWH CO2 limit is averaged over 12 rolling months. This limit only applies if the capacity factor of the unit is equal to or exceeds 60% on an annual basis.

Verification: The project owner shall demonstrating compliance with this condition as part of the Quarterly Operation Reports (AQ-SC8). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-11 For the purpose of determining compliance with District Rule 475, combustion contaminants emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[Rule 475]

Verification: The project owner shall demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-12 The project owner shall not use natural gas containing the following specified compounds:

Compound	Grains per 100 scf
H_2S	Greater than 0.25

This concentration limit is an annual average based on monthly sample of natural gas composition or gas supplier documentation. Gaseous fuel samples shall be tested using District Method 307-91 for total sulfur calculated as H_2S.

[Rule 1303(b) – Offset]

Verification: The project owner shall submit fuel usage records and calculations required to demonstrate compliance with this condition as part of the Quarterly Operational Reports (**AQ-SC8**).

AQ-13 The project owner shall limit the number of startups to no more than 90 in any one calendar month.

The number of cold start ups shall not exceed 5 per month, the number of warm start ups shall not exceed 25 per month, and the number of hot start ups shall not exceed 60 per month.

For the purposes of this condition:

A cold start up is defined as a startup which occurs after the steam turbine has been shut down for 49 hours or more. A cold start up shall not exceed 90 minutes. Emissions from a cold start up shall not exceed the following: NOx - 29 lbs., CO – 116 lbs., VOC – 28 lbs.

A warm start up is defined as a startup which occurs after the steam turbine has been shut down for 9 – 49 hours. A warm start up shall not exceed 32.5 minutes. Emissions from a warm start up shall not exceed the following: NOx - 17 lbs., CO – 46 lbs., VOC – 21 lbs.

A hot start up is defined as a startup which occurs after the steam turbine has been shut down for less than 9 hours. A hot start up shall not exceed 32.5 minutes. Emissions from a hot start up shall not exceed the following: NOx - 17 lbs., CO – 34 lbs., VOC – 21 lbs.

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

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[Rule 2005]

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-14 The project owner shall limit the number of shutdowns to no more than 90 in any one calendar month.

Shutdown time shall not exceed 10 minutes per shutdown. Emissions from a shutdown shall not exceed the following: NOx - 9 lbs., CO – 46 lbs., VOC – 31 lbs.

The project owner shall maintain records, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[Rule 2005]

Verification: The project owner shall provide a table demonstrating compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-15 The project owner shall limit the power output of the plant to no more than 939 MWs. The 939 MW limit is based on the net power output.

The net electrical output shall be measured at the breaker of the transmission system interconnection point in the generation switchyard. The monitoring equipment shall meet ANSI Standard No. C12 or equivalent, and have an accuracy of +/-0.2 percent.

The net electrical output from each meter shall be recorded at the CEMS data acquisition system.

The project owner shall maintain records, for a minimum of five years, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[Rule 1304 - Modeling and Offset Exemption]

Verification: The project owner shall report the maximum net megawatts generated monthly to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-16 The project owner shall limit the power output of the plant to no more than 972 MW gross.

The 972 MW limit is based on the gross power output.

The gross electrical output shall be measured at the each of the 8 generators.

The monitoring equipment shall meet ANSI Standard No. C12 or equivalent, and have an accuracy of +/-0.2 percent.

The gross electrical output from generators shall be recorded at the CEMS data acquisition system.

The project owner shall maintain records, for a minimum of five years, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[Rule 1304 - Modeling and Offset Exemption]

Verification: The project owner shall report the maximum gross megawatts generated monthly to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-17 The project owner shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be tested	**Required Test Method(s)**	**Averaging Time**	**Test Location**
NO_X emissions	District Method 100.1	1 hour	Outlet of the SCR
CO emissions	District Method 100.1	1 hour	Outlet of the SCR
SO_X emissions	Approved District method	District approved averaging time	Fuel Sample
VOC emissions	Approved District method	1 hour	Outlet of the SCR
PM10 emissions	Approved District method	District approved averaging time	Outlet of the SCR
PM2.5	Approved District method	District approved averaging time	Outlet of the SCR
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR

The test shall be conducted after SCAQMD approval of the source test protocol, but no later than 180 days after initial start-up. 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 to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate in cubic feet per hour (CFH), the flue gas flow rate, and the turbine generating output in MW net and MW gross.

The test shall be conducted in accordance with an SCAQMD approved test protocol. The protocol shall be submitted to the SCAQMD engineer no later than 45 days before the proposed test date and shall be approved by the SCAQMD 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 test shall be conducted when this equipment is operating at loads of 100 and 70 percent without duct firing, and 100 percent with duct firing.

For natural gas fired turbines only, volatile organic compound (VOC) compliance shall be demonstrated as follows: a) stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) analysis of canisters are per EPA Method TO-12 (with pre concentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F. The use of this alternative method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The results shall be reported with two significant digits.

[Rule 1303(a)(1) – BACT, Rule 1303(b)(2) – Offset, Rule 1703-PSD, Rule 2005]

Verification: The project owner shall submit the proposed protocol for the initial 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 source test results no later than 60 days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.

AQ-18 The project owner shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be tested	**Required Test Method(s)**	**Averaging Time**	**Test Location**
NH_3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR

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 CEMS, shall be simultaneously recorded during the

ammonia slip test. If the CEMS is inoperable, 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]

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-19 The project owner shall conduct source test(s) for the pollutant(s) identified below.

Pollutant to be tested	**Required Test Method(s)**	**Averaging Time**	**Test Location**
SOX emissions	Approved District method	District approved averaging time	Fuel Sample
VOC emissions	Approved District method	1 hour	Outlet of the SCR
PM10 emissions	Approved District method	District approved averaging time	Outlet of the SCR

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

The test shall be conducted and the results submitted to the SCAQMD 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 when this equipment is operating at 100 percent of maximum heat input.

For natural gas fired turbines only, volatile organic compound (VOC) compliance shall be demonstrated as follows: a) stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) analysis of canisters are per EPA Method TO-12 (with pre concentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F.

The use of this alternative method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for

natural gas fired turbines. The results shall be reported with two significant digits.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emission limit.

[Rule 1303(a)(1) – BACT, Rule 1303(b)(2) – Offset, Rule 475]

Verification: The project owner shall submit the proposed 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 notify the District and CPM no later than 10 days prior to the proposed source test date and time. The project owner shall submit source test results no later than 60 days following the source test date to both the District and CPM.

AQ-20 The project owner shall install and maintain a continuous emissions monitoring system (CEMS) to measure the following parameters:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, in accordance with approved SCAQMD Rule 218 CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

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

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

CO Emission Rate, lbs/hr = K*Cco*Fd[20.9/(20.9%-%O_2 d)][(Qg*HHV)/10E6], where

K = 7.267*10^{-8} (lbs/scf)/ppm

Cco = Average of 4 consecutive 15 min. average CO concentrations, ppm

Fd = 8710 dscf/MMBTU natural gas

%O_2, d= Hourly average % by volume O_2 dry, corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross high heating value of the fuel gas, BTU/scf

[Rule 1303 – BACT, Rule 1703-PSD]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-21 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. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, in accordance with approved SCAQMD Regulation XX CEMS plan application. The project owner shall not install the CEMS prior to receiving initial approval from SCAQMD.

Rule 2012 provisional relative accuracy test audit (RATA) 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 initial start up and the provisional certification date of the CEMS, the project owner shall comply with the requirements of Rule 2012(h)(2) and 2012(h)(3).

[Rule 1703 – PSD, Rule 2005, Rule 2012]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-22 The project owner shall install this equipment according to the following requirements:

Construction shall commence within 12 months of the date of the permit to construct unless the permit is extended, but in no case should the start of construction exceed 18 months from the date of the permit to construct. Construction shall not be discontinued for a period of 18 months or more.

[Rule 205, 40 CFR Part 52]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-23 The project owner shall upon completion of the construction, operate and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 12-AFC-02 project.

[CEQA]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-24 The project owner shall install this equipment according to the following requirements:

Total commissioning hours shall not exceed 491 hours of operation for each turbine from the date of initial turbine start up. Total commissioning hours without control shall not exceed 47 hours of operation for each turbine. Only one turbine shall undergo steam blows at any one time and at a load of no more than 50%. During steam blows, the other two turbines in the block shall not be fired. During all other commissioning activities outside of steam blows, a maximum of 2 turbines may be operated at any one 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.

The project owner shall provide SCAQMD with written notification of the initial startup date. Written records of commissioning start ups, and shutdowns shall be maintained and be made available upon request from SCAQMD.

[Rule 1303 – BACT, Rule 1303 – Offsets, Rule 1703 – PSD, Rule 2005]

Verification: The project owner shall submit CEMS records to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**).

AQ-25 The project owner shall, upon completion of the construction, operate and maintain this equipment according to the following specifications:

The project owner shall record the total net power generated in a calendar month in megawatt-hours.

The project owner shall calculate and record greenhouse gas emissions for each calendar month using the following formula:

GHG = 60.08 * FF

Where, GHG is the greenhouse gas emissions in tons of CO2 and FF is the monthly fuel usage in millions standard cubic feet.

The project owner shall calculate and record the GHG emissions in pounds per net megawatt-hour on a 12-month rolling average. The GHG emissions from this equipment shall not exceed 652,827 tons per year on a 12-month rolling average basis. The calendar annual average GHG emissions shall not exceed 1,053.7 lbs per net megawatt-hour (1,138.0 lbs per net megawatt hour inclusive of equipment degradation).

The project owner shall maintain records in a manner approved by the SCAQMD to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

[Rule 1714]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-26 The project owner shall, upon completion of the construction, operate and maintain this equipment according to the following specifications:

The project owner shall record the total gross power generated in a calendar month in megawatt-hours.

The project owner shall calculate and record greenhouse gas emissions for each calendar month using the following formula:

GHG = 60.08 * FF

Where, GHG is the greenhouse gas emissions in tons of CO2 and FF is the monthly fuel usage in millions standard cubic feet.

The project owner shall calculate and record the GHG emissions in pounds per gross megawatt-hours on a 12-month rolling average. The calendar annual average GHG emissions shall not exceed 1,000 lbs per gross megawatt-hour, or the applicable limit which is published in the final EPA rule.

The project owner shall maintain records in a manner approved by the SCAQMD to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

[40 CFR60 Subpart KKKK]

The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-27 This equipment shall not be operated unless the facility holds 39,854 pounds of NOx RECLAIM Trading Credits (RTCs) in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 62,507 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Rule 2005]

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (**AQ-SC8**).

AQ-28 This equipment shall not be operated unless the facility holds 2,694 pounds of SOx RECLAIM Trading Credits (RTCs) in its allocation account to offset

the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 3,798 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Rule 2005]

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (**AQ-SC8**).

AQ-29 The project owner shall provide to the District a source test report in accordance with the following specifications:

- Source test results shall be submitted to the District no later than 60 days after the source tests required under conditions AQ-17, AQ-18, and AQ-19 are conducted.

- Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lb/hr), and lb/MMCF. In addition, solid particulate matter (PM) emissions, if required to be tested, shall also be reported in terms of grains/dry standard cubic feet.

- All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. 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, fuel flow rate (cubic feet per hour), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[Rule 1303(a)(1) - BACT, Rule 1303(b)(2) - Offset]

Verification: The project owner shall submit the proposed protocol for the initial 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 source test results no later than 60 days following the source test date to both the District and CPM. The project owner shall notify the District and CPM no later than 10 days prior to the proposed initial source test date and time.

AQ-30 The project owner shall keep records in a manner approved by the District, for the following parameter(s) or item(s):

~~Commissioning hours and type of control and fuel use~~

~~Date, time, and duration of each start-up and shutdown, and the type of startup (cold, warm, or hot).~~

~~In addition to the requirements of a certified continuous emissions monitoring system (CEMS), natural gas fuel use records shall be kept during and after the commissioning period and prior to CEMS certification~~

~~Minute by minute data (NO_2 and O_2 concentration and fuel flow rate at a minimum) for each turbine start up~~

~~Monthly number of hours each turbine is operated with duct firing~~

~~Total annual power output in MWh~~

~~[Rule 1303(b)(2) - Offsets]~~

Verification: ~~The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.~~

~~DUCT BURNER~~

~~AQ-31~~ ~~This equipment shall not be operated unless the facility holds 13,488 pounds of NOx RECLAIM Trading Credits (RTCs) in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 21,155 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.~~

~~[Rule 2005]~~

Verification: ~~The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (**AQ-SC8**).~~

~~AQ-32~~ ~~This equipment shall not be operated unless the facility holds 912 pounds of SOx RECLAIM Trading Credits (RTCs) in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the project owner demonstrates to the Executive Officer that, at the commencement of each compliance year~~

after the start of operation, the facility holds 1,286 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Rule 2005]

Verification: The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District as part of Quarterly Operation Reports (**AQ-SC8**).

SCR

AQ-33 The 5 ppmv NH_3 emission limit is averaged over 60 minutes at 15% O_2, dry basis. The project owner shall calculate and continuously record the NH_3 slip concentration using the following:

NH_3 (ppmv) = [a*b*(c*1.2)/1E+06]*1E+06/b where,

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

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

c = change in measured NOx across the SCR (ppmvd at 15% O_2)

The project owner shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months. The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The project owner shall use the above described method or another alternative method approved by the Executive Officer.

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.

[Rule 1303(a)(1) - BACT]

Verification: The project owner shall include exceedances of the hourly ammonia slip limit as part of the Quarterly Operation Reports (**AQ-SC8**). Exceedances of the ammonia limit shall be reported as prescribed herein. Chronic exceedances of the ammonia slip limit shall be identified by the project owner and confirmed by the CPM within 60 days of the fourth quarter Quarterly Operation Report (**AQ-SC8**) being submitted to the CPM. If a chronic exceedance is identified and confirmed, the project owner shall work in conjunction with the CPM to develop a reasonable compliance plan to investigate and redress the chronic exceedance of the ammonia slip limit within 60

days of the above confirmation. The project owner shall include all calibration results performed as part of Quarterly Operation Reports (**AQ-SC8**).

AQ-34 The project owner shall install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

The project owner shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

The injected ammonia rate shall be maintained within 11.8 gal/min and 33 gal/min except during start ups and shutdowns

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-35 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.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

The exhaust temperature at the inlet of the selective catalytic reduction shall be maintained between 400-700 deg F except during start up and shutdowns

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-36 The project owner shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the selective catalytic reduction catalyst bed in inches of water column.

The project owner shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

The differential pressure shall be maintained between 1.5 " WC and 3.5 " WC.

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-37 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number **AQ-34**

Condition Number **AQ-35**

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-38 For the purpose of the following condition numbers, continuous monitoring 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.

Condition Number: **AQ-36**

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-39 The project owner shall upon completion of the construction, operate and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 12-AFC-2 project.

[CEQA]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

CO CATALYST

AQ-40 The project owner shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the CO Catalyst.

The project owner shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

[Rule 1303(a)(1) – BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AMMONIA STORAGE TANK

AQ-41 The project owner shall vent this equipment, during filling, only to the vessel from which it is being filled.

[Rule 1303(a)(1)-BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-42 The project owner shall install and maintain a pressure relief valve set at 50 pounds per square inch gage (psig).

[Rule 1303(a)(1)-BACT]

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-43 The project owner shall upon completion of the construction, operate and maintain this equipment according to the following specifications:

In accordance with all mitigation measures stipulated in the final California Energy Commission decision for the 12-AFC-2 project.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

WORKER SAFETY & FIRE PROTECTION

WORKER SAFETY-1 PROJECT CONSTRUCTION SAFETY AND HEALTH PROGRAM

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

- Construction Personal Protective Equipment Program;
- Construction Exposure Monitoring Program;
- Construction Injury and Illness Prevention Program;
- Construction Emergency Action Plan; and
- 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 Huntington Beach Fire Department for review and comment prior to submittal to the CPM for approval.

Verification: 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 Safety and Health Program. The project owner shall provide ~~a copy of a letter~~ to the CPM **a copy of the letter** from the Huntington Beach Fire Department stating the fire department's ~~timely~~ comments**, if and when any are received,** on the Construction Fire Prevention Plan and Emergency Action Plan.

WORKER SAFETY-2 PROJECT OPERATIONS AND MAINTENANCE SAFETY AND HEALTH PROGRAM

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

- an Operation Injury and Illness Prevention Plan;
- an Emergency Action Plan;
- Hazardous Materials Management Program;
- Fire Prevention Plan (8 Cal Code Regs. § 3221); and
- Personal Protective Equipment Program (8 Cal Code Regs, §§ 3401—3411).

The Operation Injury and Illness Prevention Plan, Emergency Action Plan, 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 and the Emergency Action Plan shall also be submitted to the Huntington Beach Fire Department for review and comment.

Verification: 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 of a letter to the CPM from the Huntington Beach Fire Department stating the fire department's ~~timely~~ comments**, if and when any comments are received,** on the Operations Fire Prevention Plan and Emergency Action Plan.

WORKER SAFETY-3 CONSTRUCTION SAFETY SUPERVISOR

The project owner shall assign a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, ~~is~~ has knowledge of power plant construction activities and relevant 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;
- assure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;
- assure that all construction and commissioning workers and supervisors receive adequate safety training;
- complete accident and safety-related incident investigations and emergency response reports for injuries and inform the CPM of safety-related incidents; and
- assure that all the plans identified in Conditions of Certification WORKER SAFETY-1 and -2 are implemented.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit the name and contact information for the CSS to the CPM for review and approval. 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:

- 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; and
- report of accidents and injuries that occurred during the month.

WORKER SAFETY- 4 SAFETY MONITOR

The project owner shall, through an agreement with the Chief Building Official (CBO), obtain and pay for the services of a Safety Monitor. The services of the Safety Monitor shall be in addition to other work performed by the CBO. The Safety Monitor shall be selected by and report directly to the CBO 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 have full access to the project site to conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill those responsibilities.

Verification: 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 AUTOMATIC EXTERNAL DEFIBRILLATOR

The project owner shall ensure that a portable automatic external defibrillator (AED) is located and properly maintained and functioning on site during all demolition, construction, and operations. The project owner shall prepare and implement a training program on the use of the AED. The training program shall be submitted to the CPM for review and approval. During construction and commissioning, 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 shall be trained in its use.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit the AED training program to the CPM for review and approval. The project owner shall also submit proof that a portable automatic external defibrillator (AED) exists on site in the Monthly Compliance Report and the Annual Compliance Report.

WORKER SAFETY-6 EMERGENCY ACCESS PLAN

The project owner shall prepare an Emergency Access Plan that shows all of the following: (1) a 26-foot wide fire lane that will provide a continuous loop around HBEP Block 1; (2) a 26-foot wide fire lane that will provide a continuous loop around HBEP Block 2; (3) a 26-foot wide fire lane from the HBEP main entrance to the continuous loops referenced in (1) and (2) above; and (4) a 26-foot wide fire lane from a secondary access point to the continuous loops referenced in (1) and (2) above. Both access lanes shall connect to a public street. Corners must allow for clear travel of a minimum 17-foot inner radius and 45-foot outer radius (radius must be concentric). The fire lanes shall be designed and maintained to support the imposed loads of fire apparatus (75,000 lbs. load/12,000 point load) and shall be surfaced to provide all-weather driving capabilities. Fire lane signage shall be provided as per City of Huntington Beach Specification #415. The 26-foot wide fire lanes shall meet the applicable requirements of the California Fire Code, City of Huntington Beach Municipal Code Chapter 17.56 - Huntington Beach Fire Code, and the Huntington Beach Fire Department City Specifications.

Verification: At least 60 days prior to the start of construction of any structures or components listed in the CBO-approved master drawing and master specification list, or within a timeframe approved by the CPM, the project owner shall submit the Emergency Access Plan to the **Huntington Beach** ~~City~~ Fire Department for review and timely comment, and to the CPM and CBO for review and approval.

WORKER SAFETY-7 NFPA 850 FIRE PROTECTION FOR ELECTRIC GENERATING PLANTS

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. All applicable NFPA 850 provisions and actions that are otherwise recommendations shall be incorporated herein as requirements. In any situations where both NFPA 850 and the state or local LORS have application, the more restrictive shall apply.

Verification: 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 the fire protection system, the project owner shall provide all fire protection system specifications and drawings to the Huntington Beach Fire Department for review and comment, to the CPM for review and approval, and to the DCBO for plan check and construction inspection.

HAZARDOUS MATERIALS

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).

Verification: The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials, strengths, and quantities contained at the facility.

HAZ-2 The project owner shall concurrently provide a Business Plan and a Risk Management Plan (RMP) prepared pursuant to the California Accidental Release Program (CalARP) to the Huntington Beach Fire Department and the CPM for review. After receiving comments from the Huntington Beach Fire Department and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final Business Plan and RMP shall then be provided to the Huntington Beach Fire Department for information and to the CPM for approval.

Verification: At least thirty (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 Business Plan to the CPM for approval.

At least thirty (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 Huntington Beach Fire Department) 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 thirty (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 to **the ASME Code for Unfired Pressure Vessels, Section VIII, Division 1** ~~either the ASME Pressure Vessel Code and ANSI K61.6 or to API 620~~. ~~In either case, t~~**T**he storage tank shall be protected by a secondary containment basin capable of holding **precipitation from a 24 hour, 25-year storm event plus 100 percent capacity of the largest tank within its boundary** ~~125 percent of the storage volume or the storage volume plus the volume associated with 24 hours of rain assuming the 25-year storm~~. The containment basi**n**~~s~~ shall

incorporate a vented cover that allows free flow of any aqueous ammonia release into the containment, yet limits the total vent area to not more than 16 square ~~ft~~**feet**. The final design drawings and specifications for the ammonia storage tank and secondary containment basins shall be submitted to the CPM.

Verification: At least sixty (60) days prior to delivery of aqueous ammonia to the facility, the project owner shall submit final design drawings and specifications for the ammonia storage tank and secondary containment basin 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 which meet or exceed the specifications of DOT Code MC-307.

Verification: At least thirty (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 (I-405 to Beach Boulevard (State Highway 39), south onto Pacific Coast Highway (State Highway 1), and left onto Newland Street, then right into the HBEP site). The project owner shall obtain approval of the CPM if an alternate route is desired.

Verification: At least sixty (60) days prior to initial receipt of bulk quantities (>800 gallons per delivery) of hazardous materials (e.g., aqueous ammonia, lubricating or insulating oils) and at least ten (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;

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 or emergency; and,

6. evacuation procedures.

Verification: At least thirty (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 will 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 v1.9** ~~2002~~).

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;

7. 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 power plant control room and security station (if separate from the control room) with cameras able to pan, tilt, and zoom, have low-light capability, and are able to view 100% of the perimeter fence, the ammonia storage tank, the outside entrance to the control room, and the front gate; and,

9. Additional measures to ensure adequate perimeter security consisting of either:

   A. Security guard(s) present 24 hours per day, 7 days per week; or

   B. Power plant personnel on site 24 hours per day, 7 days per week, and perimeter breach detectors or on-site motion detectors.

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 Council, after consultation with both appropriate law enforcement agencies and the applicant.

Verification: At least thirty (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 a statement 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 statement 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 NFPA 56. A

written procedure shall be developed and implemented as per NFPA 56, section **4.4.1.** ~~4.3.1~~

Verification: 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 NFPA 56, section **4.4.1** ~~4.3.1~~) 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~~ **Chief Building Official** for information and to the CPM for review and approval.

SAMPLE CERTIFICATION (Attachment A)
Affidavit of Compliance for Project Owners

I,

_____

(Name of person signing affidavit)(Title)

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

I,

_____

(Name of person signing affidavit)(Title)

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

I,

_____

_____

(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 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.

WASTE MANAGEMENT

WASTE-1 The project owner shall ensure that the HBEP project site is properly characterized and remediated as necessary pursuant to the corrective

action plans reviewed by DTSC, the Huntington Beach Fire Department (HBFD), and/or the Orange County Health Care Agency. In no event shall project construction commence in areas requiring characterization and remediation until the CPM determines, with confirmation from the appropriate regulatory agency, that all necessary remediation has been accomplished.

Prior to and during grading and construction, discovery of additional soil contamination not previously identified or already included in corrective action plans, work plans, or closure plans must be reported to the CPM, DTSC, and the HBFD immediately.

Verification: At least 45 days prior to remediation the project owner shall submit to the CPM for approval copies of remediation documentation, such as, but not limited to, soil sample results, work plans, and agreements regarding the corrective action plan requirements and activities at the project site. Pertinent correspondence such as, but not limited to, soil sample results, work plans, agreements, and authorizations involving DTSC, the HBFD, and/or (if applicable) the Orange County Health Care Agency regarding the corrective action plan requirements and activities at the project site will be provided to the CPM within 10 days of receipt.

At least 15 days prior to the start of site mobilization, the project owner shall provide to the CPM written notice from the appropriate regulatory agency that the HBEP site has been investigated and remediated as necessary in accordance with the corrective action plan.

If soil contamination not previously identified or already included in corrective action plans, work plans, or closure plans is encountered prior to or during grading the project owner shall notify the CPM and DTSC, revise the approved work plan and submit it for concurrent CPM, HBFD, and DTSC review within 30 days after contamination is identified. Comments received within 30 days from all parties shall be incorporated and provided to DTSC for approval.

WASTE-2 Prior to demolition of existing structures associated with Units 1, 2, and 5, the project owner shall complete and submit a copy of a SCAQMD Asbestos Demolition Notification Form to the CPM and the SCAQMD for approval. After receiving approval, the project owner shall remove all Asbestos Containing Material (ACM) from the site prior to demolition.

Verification: No less than sixty (60) days prior to commencement of structure demolition, the project owner shall provide the Asbestos Demolition Notification Form to the CPM for review and approval. The project owner shall inform the CPM via the monthly compliance report, of the data when all ACM is removed from the site.

WASTE-3 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 show 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.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the resume of the professional engineer or professional geologist to the CPM for review and approval.

WASTE-4 If potentially 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 professional 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.

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

WASTE-5 The project owner shall prepare a ~~Construction Waste Management Plan~~ **Construction and Demolition (C&D) Debris Waste Reduction and Recycling Plan** for all wastes generated during **demolition and** construction of the facility and shall submit the plan to the CPM for review and approval. The plan shall contain, at a minimum, the following:

- a description of all construction waste streams, including projections of frequency, amounts generated, and 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.

- a method for collecting weigh tickets or other methods for verifying the volume of transported and or location of waste disposal; and,
- a method for reporting to demonstrate project compliance with construction waste diversion requirements of 50 percent pursuant to the CALGreen Code and Construction and Orange County Construction & Demolition Recycling and Reuse Program.

Verification: The project owner shall submit the **C&D Debris Waste Reduction and Recycling Plan** ~~Construction Waste Management Plan~~ to the CPM **for review and approval and to the city of Huntington Beach Department of Planning and Building** for ~~approval~~ **review and comment** no less than 30 days prior to the initiation of **demolition** and construction 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 Waste Management Plan; and update the Construction Waste Management Plan, as necessary, to address current waste generation and management practices.

WASTE-6 Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

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

WASTE-7 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 contain, at a minimum, the following:

- 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;

- 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, notices, and/or authorizations shall be included in the plan and updated as necessary;
- 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
- a detailed description of how facility wastes will be managed and disposed upon closure of the facility.

Verification: 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-8 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 30 days of the date the release was discovered.

BIOLOGICAL RESOURCES

APPOINTMENT AND QUALIFICATIONS OF DESIGNATED BIOLOGIST

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 and to the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) for review and comment.

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.

Current or prior possession of USFWS 10(a)(1)(A) permit and/or CDFW scientific collecting permit is preferred, but not required.

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.

The designated biologist may be replaced by submitting the required resume, references and contact information to the CPM for review and approval and to CDFW and USFWS for review and comment.

Verification: The project owner shall submit the specified information at least 75 days prior to the start of site mobilization or construction-related ground disturbance activities. No pre-construction site mobilization or construction-related activities shall commence until a Designated Biologist has been approved by the CPM.

The project owner may replace a Designated Biologist by submitting the required resume, references, and contact information to the CPM for review and approval and to the CDFW and USFWS for review and comment, at least ten working days prior to the termination or release of the then-current 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.

The CPM may withhold approval of a Designated Biologist based upon proof that a proposed Designated Biologist has repeatedly failed to comply with the conditions of any Energy Commission license as they pertain to biological resources. **If the project owner proposes to use a Designated Biologist previously-approved by the Energy Commission within the preceding five (5) years, the CPM shall have ten (10) business days to review the resume and statement of availability of the proposed Designated Biologist. The CPM may withhold approval of a previously-approved Designated Biologist only if (1) the non-compliance with conditions of an Energy Commission license was documented in the compliance record for the previous Energy Commission license project work or (2) if the proposed previously-approved Designated Biologist's qualifications are not commensurate with all of the minimum qualifications identified in Condition of Certification BIO-1. The CPM shall provide notice of disapproval of the proposed Designated Biologist within ten (10) business days of receipt of the resume and statement of availability of any proposed Designated Biologist. In the case of a previously-approved Designated Biologist, failure to provide notice within ten (10) business days of receipt of the resume and statement of availability of the proposed Designated Biologist shall be deemed approval of that candidate.**

The CPM shall meet and confer with the project owner regarding the **disapproval of a previously-approved Designated Biologist or the** need to **remove or** replace a Designated Biologist. Removal **or replacement** may occur if the CPM can establish that the Designated Biologist has repeatedly failed to comply with the conditions of the **Amended** HBEP license that pertain to biological resources.

In the absence of comments, the CPM shall deem the Designated Biologist acceptable to USFWS and/or CDFW.

DUTIES OF DESIGNATED BIOLOGIST AND BIOLOGICAL MONITOR(S)

BIO-2 The project owner shall ensure that the Designated Biologist performs the following during any site (or related facilities) mobilization, ground disturbance, grading, demolition, and construction 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) (Condition of Certification **BIO-6**) 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;
4. Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
5. Inspect or direct the site personnel how to inspect active construction areas where animals may have become trapped prior to construction commencing each day. Inspect or 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. Inspect soil or spoil stockpiles and dust abatement watering for compliance with Condition of Certification **BIO-7**. Inspect erosion control materials (e.g., hay bales) to confirm weed-free certification. Inspect weed infestations and monitor eradication measures to determine success. Inspect trash receptacles, monitor site personnel compliance with trash handling, pet prohibitions, and all other **Worker Environmental Awareness Program (**WEAP**)** components (Condition of Certification **BIO-5**);
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;
8. Maintain written records of the tasks specified above and those included in the BRMIMP;
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 CDFW, 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.

Verification: The Designated Biologist shall notify the CPM of any noncompliance or special-status species injury or mortality within one (1) working day of the incident. The Designated Biologist shall submit in the **monthly compliance report (**MCR**)** to the CPM copies of all written reports and summaries that document construction activities

that have the potential to affect biological resources. The Designated Biologist's written records will be made available for the CPM's inspection on request at any time during normal business hours. 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.

APPOINTMENT AND QUALIFICATIONS OF BIOLOGICAL MONITOR

BIO-3 The project owner shall submit the resume, at least three references, and contact information of the proposed Biological Monitor(s) 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.

The project owner may replace a Biological Monitor by submitting the required resume, references, and contact information to the CPM for review and approval and to CDFW and USFWS for review and comment, at least ten working days prior to the termination or release of the then current Biological Monitor. 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 Biological Monitor is proposed to the CPM for consideration.

Verification: The project owner shall submit the specified information to the CPM for approval at least 30 days prior to the start of any project-related site disturbance activities. Within 10 days of completion of training, the Designated Biologist shall submit a written statement to 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.

POWERS OF DESIGNATED BIOLOGIST/BIOLOGICAL MONITOR(S)

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 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;
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; and
4. The CPM, in coordination with CDFW or USFWS as appropriate, will determine if corrective action has been effective and will direct the project owner to take further corrective action as needed.

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 within one (1) working day of initiating the corrective action.

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.

BIOLOGICAL RESOURCES WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

BIO-5 The project owner shall develop and implement HBEP-specific Worker Environmental Awareness Program (WEAP) and submit the WEAP to the CPM for review and approval and to the USFWS and CDFW for review and comment. The WEAP shall be administered to all onsite 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 light-footed ~~clapper~~ **Ridgway's** rail, western snowy plover, California least tern and Belding's savannah sparrow, 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. Include a discussion of the biological resources conditions of certification;
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.

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

Verification: At least 45 days prior to the start of any planned project-related site disturbance activities, 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 Notice to Proceed will not be issued until the WEAP has been approved by the CPM.

The project owner shall provide in the monthly compliance reports 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.

Throughout the life of the project, WEAP **training** shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Upon completion of the orientation,

employees shall sign a form stating that they attend the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the CMP upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate indicating that they have completed the required training.

Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least six months after the completion of all project construction activities. During project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.

In the absence of comments, the CPM shall deem the WEAP acceptable to USFWS and/or CDFW.

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 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 and whether the project owner has agreed to the proposed measures;
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 agency terms and conditions, such as those provided in the National Pollution Discharge Elimination System (NPDES) Construction Activities Stormwater General Permit;
4. A list or tabulation of 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 demolition activities;

7. All locations, shown on a map at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction;
8. Aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities prior to any site or related facilities mobilization disturbance, for comparison with aerial photographs at the same scale to be provided and subsequent to completion of project construction (see Verification).
9. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
10. Performance standards from each biological resource condition of certification to determine if mitigation and conditions are or are not successful;
11. 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 BRMIMP 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.

Verification: No fewer than 45 days prior to planned start of construction, the project owner will submit a draft BRMIMP to the CPM for review and approval and to CDFW and USFWS for review and comment. The Notice to Proceed will not be issued until the BRMIMP has been approved by the CPM. In the absence of comments, the CPM shall deem the BRMIMP acceptable to USFWS and/or CDFW.

If the National Pollution Discharge Elimination System (NPDES) Construction Activities Stormwater General Permit or any other permits has not have not yet been received when the BRMIMP is first submitted, those permits shall be submitted to the CPM, the CDFW, and USFWS, within 5 days of their receipt, and the BRMIMP shall be revised or supplemented to reflect the permit conditions, if any.

Prior to implementing any changes to the approved BRMIMP, the project owner shall provide a draft of the proposed modification to the CPM for review and approval and to CDFW and USFWS for review and comment. No modification shall be implemented until approved by the CPM. In the absence of comments, the CPM shall deem the modification to the BRMIMP acceptable to USFWS and/or CDFW.

Implementation of all 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. The Construction Closure Report will include a set of aerial photographs of the site at an approved scale for comparison with the pre-construction set (Item 8 above).

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:

1. 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. Spoils shall be stockpiled in disturbed areas which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat. All disturbances, vehicles, and equipment shall be confined to the flagged areas.

2. At the end of each work day, the Designated Biologist, Biological Monitor, and/or site personnel shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled. If site personnel are inspecting trenches, bores, and other excavations and wildlife is trapped, they will immediately notify the Designated Biologist and/or Biological Monitor. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or 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. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

3. Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Reducing Avian Collisions with Power Lines (APLIC 2012) to reduce the likelihood of large bird electrocutions and collisions.
4. Spoils shall not be stockpiled adjacent to the southeastern fence line to minimize potential for spoils to enter into adjacent wetlands.
5. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.
6. To the extent feasible, FAA visibility lighting shall employ only strobed, strobe-like, or blinking incandescent lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" duel strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used.
7. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract California least tern predators to construction sites. During construction, site personnel shall patrol these areas to ensure water does not puddle and attract crows and other wildlife to the site, and shall take appropriate action to reduce water application rates where necessary.

   During construction, each employee shall report on-site deaths, including road kill, and injuries of special-status species to the Designated Biologist or Biological Monitor immediately upon discovery. The Designated Biologist or Biological Monitor shall remove the carcass or injured animal promptly. The Designated Biologist or Biological Monitor shall immediately report any dead or injured special-status species to CDFW and/or USFWS and the CPM, and the project owner shall follow instructions that are provided by CDFW or USFWS. The Designated Biologist shall maintain a record of all dead or injured special-status species, including species name, physical characteristics of the animal (sex, age class, length, and weight), disposition of the animal, and other pertinent information and shall include this information in the MCR.
8. During operations, each employee shall report all deaths, including road kill, and injuries of special-status species to the Project Environmental Compliance Monitor immediately upon discovery shall

be notified. The Project Environmental Compliance Monitor shall remove the carcass or injured animal promptly. The Project Environmental Compliance Monitor shall immediately report any dead or injured special-status species to CDFW and/or USFWS and the CPM, and the project owner shall follow instructions that are provided by CDFW or USFWS. The Project Environmental Compliance Monitor shall maintain a record of all dead or injured special-status species, including species name, physical characteristics of the animal (sex, age class, length, and weight), disposition of the animal, and other pertinent information.

9. 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 Designated Biologist shall be informed of any hazardous spills immediately as directed in the project Hazardous Materials Plan (see Condition of Certification **HAZ-2**). Hazardous spills shall be immediately cleaned up and the contaminated soil will be properly disposed of at a licensed facility. Any on-site servicing of vehicles or construction equipment shall take place only at a designated area approved by the Designated Biologist. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.
10. During construction all trash and food-related waste shall be placed in self-closing containers and removed weekly or more frequently from the site. Workers shall not feed wildlife or bring pets to the project site.
11. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons.
12. 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 minimum area needed for safe completion of project activities, 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. Invasive non-native species shall not be used in landscaping plans and erosion control. Monitor and rapidly implement control measures to ensure early detection and eradication of weed invasions.

13. During construction and operation, the project owner shall conduct pesticide management in accordance with standard BMPs. The

BMPs shall include non-point source pollution control measures. The project owner shall use a licensed herbicide applicator and obtain recommendations for herbicide use from a licensed Pest Control Advisor. Herbicide applications must follow EPA label instructions. Minimize use of rodenticides and herbicides in the project area and prohibit the use of chemicals and pesticides known to cause harm to non-target plants and wildlife. The project owner shall only use pesticides for which a "no effect" determination has been issued by the EPA's Endangered Species Protection Program for any species likely to occur within the project area or adjacent wetlands. If rodent control must be conducted, zinc phosphide or an equivalent product shall be used.

Verification: 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 completion report identifying how measures have been completed (see Condition of Certification BIO-6 verification).

Monthly and annual compliance reports will include results of all regular inspections by the Designated Biologist and Biological Monitor(s), including but not limited to the requirements cited above and in Condition of Certification **BIO-2**.

The project owner must maintain written records of vehicle and equipment inspection and maintenance, and provide summaries in each monthly and annual compliance report. The complete written vehicle maintenance record will be available for the CPM's inspection during normal business hours.

The BRMIMP (Condition of Certification **BIO-6**) must include affirmation by the project owner that:

- All electrical component design conforms to applicable APLIC guidelines; and
- All soil binders conform to the requirements stated above.

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

BIO-8 Pre-construction nest surveys shall be conducted if construction or demolition activities will occur from February 1 through August 31. 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 areas surrounding the project site within 300 feet of the project boundary.

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 needs to 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 during February 1 through August 31 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 the survey, a no-disturbance buffer zone (protected area surrounding the nest) shall be established around each nest. Specific buffer distances are provided below for applicable avian groups (Biological Resources Table 1); these buffers may be modified with CPM's approval. For special-status species, if an active nest is identified, the size of each buffer zone shall be determined by the Designated Biologist in consultation with the CPM (in coordination with CDFW and USFWS). Nest locations shall be mapped using GPS technology.

Biological Resources Table 1:
HBEP Construction and Demolition Buffers for Active Nests

Avian Group	**Species Potentially Nesting in the Project Vicinity**	**Buffer for Construction and Demolition Activities (feet)**
Bitterns and herons	Black-crowned night heron, great blue heron, great egret, green heron, snowy egret	250
Cormorants	Double-crested cormorant	100
Doves	Mourning dove	25
Geese and ducks	American widgeon, blue-winged teal, cinnamon teal, Canada goose, gadwall, mallard, northern pintail, ruddy duck	100
Grebes	Clark's grebe, eared grebe, horned grebe, pied-billed grebe, western grebe	100
Hummingbirds	Allen's hummingbird, Anna's hummingbird, black-chinned hummingbird	25
Plovers	Black-bellied plover, killdeer	50
Raptors (Category 1)	American kestrel, barn owl, red-tailed hawk	50
Raptors (Category 2)	Cooper's hawk, red-shouldered hawk, sharp-shinned hawk	150
Raptors (Category 3)	Northern harrier, white-tailed kite	These are special-status species; buffer determined in consultation with CPM
Stilts and Avocets	American avocet, black-necked stilt	150
Terns	Elegant tern, Forster's tern, royal tern	100

Avian Group	Species Potentially Nesting in the Project Vicinity	Buffer for Construction and Demolition Activities (feet)
Passerines (cavity and crevice nesters)	House wren, Say's phoebe, western bluebird	25
Passerines (bridge, culvert, and building nesters)	Black phoebe, cliff swallow, house finch, Say's phoebe	25
Passerines (ground nesters, open habitats)	Horned lark	100
Passerines (understory and thicket nesters)	American goldfinch, blue-gray gnatcatcher, bushtit, California towhee, common yellowthroat, red-winged blackbird, song sparrow, Swainson's thrush	25
Passerines (scrub and tree nesters)	American crow, American goldfinch, American robin, blue-gray gnatcatcher, Bullock's oriole, bushtit, Cassin's kingbird, common raven, hooded oriole, house finch, lesser goldfinch, northern mockingbird	25
Passerines (tower nesters)	Common raven, house finch	25
Passerines (marsh nesters)	Common yellowthroat, red-winged blackbird	25
Species not covered under MBTA	Domestic waterfowl, including domesticated mallards, feral (rock) pigeon, European starling, and house sparrow	N/A

4. If active nests are detected during the survey, the Designated Biologist or Biological Monitor shall monitor all nests with buffers 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 could 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.

5. If active nests are detected during the survey, 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. A qualified biologist shall conduct a habitat assessment for light-footed ~~clapper~~ **Ridgway's** rail shall be conducted in Magnolia and Upper Magnolia Marshes during the breeding season (March 1 to August 1) immediately preceding the commencement of construction

and demolition activities. If suitable breeding habitat for the light footed ~~clapper~~ **Ridgway's** rail is identified, focused surveys will be conducted prior to any construction or demolition activities. Surveys are not required if no suitable habitat is present. If ~~clapper~~ **Ridgway's** rails are detected during the breeding season, the CPM, CDFW, and USFWS will be notified and the project owner will consult with the USFWS for incidental take authorization, if required.

Verification: The project owner shall provide notification to the CPM, CDFW, and USFWS at least 2 weeks prior to initiating the habitat assessment and any subsequent surveys for light-footed ~~clapper~~ **Ridgway's** rail; notification will include the name and resume of the biologist(s) conducting the habitat assessment and surveys and the timing of the surveys. Within ten (10) days of completion of the field work, the project owner shall provide the CPM, CDFW, and USFWS a report describing the findings of the preconstruction nest surveys and the light-footed ~~clapper~~ **Ridgway's** rail habitat assessment and focused survey (if surveys were conducted), including a description and representative photographs of habitat in the marshes; the time, date, methods, and duration of the surveys; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the surveys, the reports shall include a map or aerial photo identifying the location of the nest(s) and shall depict the boundaries of the proposed no disturbance buffer zone around the nest(s). The CPM will consider any timely comments received from CDFW and USFWS in review of the report. In the absence of comments within that timeframe, the CPM shall deem the report acceptable to USFWS and/or CDFW.

Additionally, the nest monitoring plan shall be submitted to the CPM for review and approval and to USFWS and CDFW for review and comment prior to any planned demolition or construction activities in the vicinity of any active nest. No such demolition or construction activities may proceed without CPM approval of the nest monitoring plan. If light-footed ~~clapper~~ **Ridgway's** rails are documented during the breeding season in Upper Magnolia or Magnolia Marshes, prior to any planned pile driving on the site or demolition or construction activities within 400 feet of the marsh boundary, the project owner will notify the CPM and will consult with the USFWS for incidental take authorization or a determination that no incidental take authorization is required. All impact avoidance and minimization measures related to nesting birds shall be included in the BRMIMP and implemented. In the absence of comments within that timeframe, the CPM shall deem the nest monitoring plan acceptable to USFWS and/or CDFW. Implementation of the measures shall be reported in the monthly compliance reports by the Designated Biologist.

SOIL AND WATER RESOURCES

NPDES CONSTRUCTION PERMIT REQUIREMENTS

SOIL&WATER-1: The project owner shall manage stormwater pollution from HBEP 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 HBEP project.

Verification: Thirty (30) days prior to site mobilization of HBEP construction activities, the project owner shall submit the construction SWPPP to the delegate chief building official (CBO) and compliance project manager (CPM) for review and the SWRCB for review and comment. A copy of the approved construction SWPPP shall be kept accessible onsite at all times. Within 10 days of its mailing or receipt, the project owner shall submit to the CPM any correspondence between the project owner and the Santa Ana Regional Water Quality Control Board about the general NPDES permit for discharge of stormwater associated with construction and land disturbance activities. This information shall include a copy of the notice of intent and the notice of termination submitted by the project owner to the SWRCB.

HYDROSTATIC WATER DISCHARGE PERMIT REQUIREMENTS

SOIL&WATER-2: Prior to initiation of hydrostatic testing water discharge to surface waters, the project owner shall obtain a National Pollutant Discharge Elimination System permit for discharge to the Pacific Ocean. The project owner shall comply with the requirements of the Permit Order No. R8-2009-0003, NPDES NO. CAG998001 for hydrostatic testing water discharge. The project owner shall provide a copy of all permit documentation sent to the Santa Ana Regional Water Quality Control Board or State Water Quality Control Board to the CPM and notify the CPM in writing of any reported non-compliance.

Verification: ~~Prior to construction mobilization~~ **Thirty (30) days prior to the first scheduled hydrostatic testing event**, the project owner shall submit to the CPM documentation that all necessary NPDES permits were obtained from the Santa Ana Regional Water Quality Control Board ~~or State Water Quality Control Board~~. Thirty (30) days prior to HBEP operation, 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 Board regarding NPDES permits in the annual compliance report.

GROUNDWATER DISCHARGE PERMIT REQUIREMENTS

SOIL&WATER-3: Prior to any groundwater dewatering, the project owner shall submit a dewatering plan to the CPM for review and approval. The dewatering plan shall include maximum daily and average daily pumping rates, and total volume expected to be pumped during dewatering, as well as the dates expected to be used for dewatering. The plan shall also include estimates of drawdown that may occur at the adjacent marsh land, and identify potential mitigation, as needed, as well as describe under what circumstances such mitigation would be implemented.

Discharge of dewatering water shall comply with the Santa Ana Regional Water Quality Control Board (RWQCB) and State Water Resources Control Board regulatory requirements. The project owner shall submit a Report of Waste Discharge (RWD) to the CPM and RWQCB for determination of which regulatory waiver or permit applies to the proposed discharges. The project owner shall pay all necessary fees for filing and review of the RWD and all other related fees. Checks for such fees shall be submitted to the RWQCB and shall be payable to the State Water Resources Control Board. The project owner shall ensure compliance with the provisions of the waiver or permit applicable to the discharge. Where the regulatory requirements are not applied pursuant to a National Pollutant Discharge Elimination System permit, it is the Commission's intent that the requirements of the applicable waiver or permit be enforceable by both the Commission and the RWQCB. In furtherance of that objective, the Commission hereby delegates the enforcement of the waiver or permit requirements, and associated monitoring, inspection, and annual fee collection authority, to the RWQCB. Accordingly, the Commission and the RWQCB shall confer with each other and coordinate, as needed, in the enforcement of the requirements.

Verification: Prior to any dewatering water discharge, the project owner shall submit a ~~ROWD~~ **RWD** to the RWQCB to obtain the appropriate waiver or permit **and submit the dewatering plan to the CPM**. The appropriate waiver or permit**, as well as dewatering plan,** must be obtained at least 30 days prior to the discharge. The project owner shall submit a copy of any correspondence between the project owner and the RWQCB regarding the waiver or permit and all related reports to the CPM within 10 days of correspondence receipt or submittal. **The project owner shall pay all necessary fees for filing and review of the RWD and all other related fees. Checks for such fees be submitted to the RWQCB and shall be payable to the State Water Resources Control Board.**

NPDES INDUSTRIAL PERMIT REQUIREMENTS

SOIL&WATER-4: Prior to mobilization for construction, the project owner shall obtain a National Pollutant Discharge Elimination System permit for industrial waste and stormwater discharge to the Pacific Ocean. The project owner shall discharge to the same outfall currently utilized by the Huntington Beach Generating Station under the requirements of Order No. R8-2010-0062, NPDES No. CA0001163. The project owner shall provide a copy of all permit documentation sent to the Santa Ana or State Water Board to the CPM and notify the CPM in writing of any reported non-compliance.

Verification: Prior to construction mobilization, the project owner shall submit to the CPM documentation that all necessary NPDES permits were obtained from the Santa Ana or State Water Board. Thirty (30) days prior to HBEP operation, the project owner shall submit to the CPM a copy of the Industrial SWPPP. The project owner shall submit to the CPM all copies of any relevant correspondence between the project owner and the Board regarding NPDES permits in the annual compliance report.

WATER AND SEWER CONNECTIONS

SOIL&WATER-5: The project owner shall pay the city of Huntington Beach all fees normally associated with industrial connections to the city's sanitary sewer or water supply system as defined in the city's code, Title 14 Water and Sewers.

Verification: Prior to the use of the city's water or sewer system the owner shall provide the CPM documentation indicating that the city has accepted the project's connections to the water and sewer systems. Fees paid to the city shall be reported in the Annual Compliance Report (ACR) for the life of the project.

WATER USE AND REPORTING

SOIL&WATER-6: Water supply for project operation and construction shall be potable water supplied from the city of Huntington Beach. Water use for operation of the Huntington Beach Energy Project shall not exceed ~~134~~ **120** AFY; water use for construction shall not exceed 22 AFY. A monthly summary of water use shall be submitted to the CPM.

Verification: The project owner shall record HBEP operation water use on a daily basis and shall notify the CPM within 14 days upon forecast to exceed the maximum annual use as described above. Prior to exceeding the maximum use, the owner shall provide a plan to modify operations.

The project owner shall record HBEP construction water use on a daily basis and shall notify the CPM within 14 days upon forecast to exceed the maximum annual use of 22 AFY of potable water. Prior to exceeding the maximum use, the owner shall provide a plan to modify construction practices or offset excess water use.

The project owner shall submit a water use summary report to the CPM monthly during construction and annually in the ACR during operations for the life of the project. The annual report shall include calculated monthly range, monthly average, daily maximum within each month and annual use by the project in both gallons per minute and acre-feet. After the first year and for subsequent years, this information shall also include the yearly range and yearly average potable water used by the project.

WATER METERING

SOIL&WATER-7: Prior to the use of a water source 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 to the HBEP from the water source. Those metering devices shall be operational for the life of the project and must be able to record the volume from each source separately.

Verification: At least thirty (30) days prior to use of any water source for HBEP operation, the project owner shall submit to the CPM 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.

CULTURAL RESOURCES

CUL-1 APPOINTMENT AND QUALIFICATIONS OF CULTURAL RESOURCES SPECIALIST (CRS)

A. CULTURAL RESOURCE SPECIALIST

1. Appointment and Qualifications

The project owner shall assign at least one Cultural Resources Specialist (CRS) to the project. The project owner shall submit the resume of the proposed CRS, 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 ~~include~~ 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:

a. A background in anthropology, archaeology, history, architectural history, or a related field;

b. At least 10 years of archaeological or historical experience (as appropriate for the project site), with resources mitigation and fieldwork;

c. At least one year of field experience in California; and

d. 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 to the CPM.

2. Duties of Cultural Resources Specialist

The CRS shall manage all cultural resource monitoring, mitigation, curation, and reporting activities, and any post-certification cultural resource activities (as defined above), 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 may elect to obtain the services of Cultural Resource Monitors

(CRMs), Native American Monitors (NAMs), and other technical specialists, 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 is 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 ~~C~~conditions of ~~C~~certification described in this subsection of the FSA shall continue to apply during operation of the proposed power plant.

B. CULTURAL RESOURCES MONITORS

1. Appointment and Qualifications

The project owner may assign Cultural Resources Monitors (CRMs). CRMs shall have the following qualifications:

a. 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

b. 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

c. 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:

If required pursuant to Condition of Certification **CUL-6**, the project owner shall obtain the services of qualified Native American Monitors (NAMs). Preference in selecting NAMs shall be given to Native Americans with:

a. Traditional ties to the area to be monitored, and

b. The highest qualifications as described by the Native American Heritage Commission (NAHC) document entitled: *Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites* (NAHC 2005).

Verification: The project owner shall ~~submit the specified information~~ **provide the CPM with the resume and qualifications of its CRS for review and approval** at least

75 days prior to the start of (1) ground disturbance (as defined in the Compliance Conditions 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[3], the project owner shall obtain the services of a Cultural Resources Specialist (CRS) and one or more alternate CRS.

The project owner may replace a CRS by submitting the required resume, references and contact information to the CPM at least ten 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.

The CPM may withhold approval of a CRS based upon proof that a proposed CRS has repeatedly failed to comply with the conditions of any Energy Commission license as they pertain to cultural resources. If the project owner proposes to use a CRS previously approved by the Energy Commission within the preceding five (5) years, the CPM shall have ten (10) business days to review the resume and statement of availability of the proposed CRS. The CPM may withhold approval of a previously-approved CRS only (1) if the non-compliance with conditions of an Energy Commission license was documented in the compliance record for the previous Energy Commission license project work or (2) if the proposed previously-approved CRS's qualifications are not commensurate with all criteria in Paragraph A of this Condition of Certification. The CPM shall provide notice of disapproval of the proposed CRS within ten (10) business days of receipt of the resume and statement of availability of any proposed CRS. In the case of a previously-approved CRS, failure to provide notice within ten (10) business days of receipt of the resume and statement of availability of the proposed CRS shall be deemed approval of that candidate.

The CPM shall meet and confer with the project owner regarding the disapproval of a previously-approved CRS or the need to remove or replace a CRS. Removal or replacement may occur if the CPM can establish that the CRS has repeatedly failed to comply with the conditions of the Amended HBEP license that pertain to cultural resources.

At least 20 days prior to Cultural Resources Ground Disturbances, the CRS shall provide proof of qualifications for any anticipated CRMs and additional specialists for the project to the CPM.

At least 5 days prior to additional CRMs or NAMs beginning on-site duties during the project, the CRS shall review the qualifications of the proposed CRMs or NAMs and

[3] For purposes of the Conditions of Certification for Cultural Resources, we will refer to these activities as "Cultural Resources Ground Disturbances".

send approval letters to the CPM, identifying the monitors and attesting to their qualifications.

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.

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.

No Cultural Resources Ground Disturbances 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 Cultural Resources Ground Disturbances , the project owner shall provide the CRS with copies of the AFC, data responses, confidential cultural resources reports, all supplements, the Energy Commission staff's cultural resources FSA, and the cultural resources ~~C~~**c**onditions of ~~C~~**c**ertification from the Final Decision for the project if the CRS has not previously worked on the project. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate USGS quadrangles and a map at an appropriate scale (e.g., 1:24,000 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 NRHP/CRHR-eligible historic built environment resources identified in the FSA.

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:

1. 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 Cultural Resources Ground Disturbances, the project owner shall submit the Cultural Resources Mitigation and Monitoring Plan (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, any NAMs involved

in monitoring, 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, but not be limited to, the following elements and measures:

1. The following statement included in the Introduction: "Any discussion, summary, or paraphrasing of the conditions of certification in this CRMMP is intended as general guidance and as an aid to the user in understanding the conditions and their implementation. The conditions, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CRMMP. The Cultural Resources conditions of certification from the Commission Decision are contained in Appendix A."
2. A proposed general research design that includes a discussion of archaeological research questions and testable hypotheses specifically applicable to the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. The research design shall 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 DPR 523 forms and mapped and photographed. In addition, all archaeological materials retained as a result of the archaeological investigations (survey, testing, data recovery) shall be curated in accordance with the California State Historical Resources Commission's (SHRC) Guidelines for the Curation of Archaeological Collections (SHRC 1993), 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, section 7050.5(b) and Public Resources Code, section 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 resources report (CRR), which shall be prepared according to Archaeological Resource Management Report (ARMR) guidelines.**

Verification:

~~1. A description of the contents, format, and review and approval process of the final cultural resources report (CRR), which shall be prepared according to Archaeological Resource Management Report (ARMR) guidelines.~~

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 Cultural Resources Ground Disturbances, the project owner shall submit the CRMMP to the CPM for review and approval.

3. At least 30 days prior to the start of Cultural Resources Ground Disturbances, 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, and data recovery).

4. Within 90 days after completion of Cultural Resources Ground Disturbances (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 SHRC (1993), 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 cultural resources report (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 ARMR format. The final CRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. The final CRR shall be a confidential document if it describes or maps the location(s) of cultural resources. 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 **for more than 30 days**, 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. 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.

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 State Historic Preservation Officer, 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 Cultural Resources Ground Disturbances, 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.

Verification: 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;
6. 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.
10. No ground disturbance shall occur prior to implementation of the WEAP program, unless such activities are specifically approved by the CPM.
11. 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, including Native American participation, and graphics and the informational brochure to the CPM for review and approval.
12. 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.
13. 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 UNDISCOVERED CULTURAL RESOURCES

In the event that a CRHR eligible (as determined by the CPM) cultural resource is discovered, at the direction of the CPM, the project owner shall ensure that the CRS or alternate CRS monitors full time all ground disturbances in the area where the CRHR-eligible cultural resources discovery has been made. The level, duration, and spatial extent of monitoring shall be determined by the CPM. In the event that the CRS believes that a current level of monitoring is not appropriate, 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.

Full-time archaeological monitoring for the project, if deemed necessary due to the discovery of a CRHR-eligible cultural resource, shall consist of archaeological monitoring of all earth-moving activities in the area(s) of discovery(ies), for as long as the CPM requires.

The project owner shall obtain the services of one or more NAMs to monitor construction-related ground disturbance in areas, if any, where Native American artifacts have been discovered. Contact lists of interested

Native Americans and guidelines for monitoring shall be obtained from the NAHC. Preference in selecting a NAM shall be given to Native Americans with traditional ties to the area that shall 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 an NAM.

If monitoring should be needed, as determined by the CPM, due to the discovery of a CRHR-eligible cultural resource, the CRS 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 on forms provided by the CPM. Copies of the daily monitoring logs shall be provided by the CRS to the CPM, if requested by the CPM. From these logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring has been suspended.

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

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

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

The research design in the CRMMP shall govern the collection, treatment, retention/disposal, and curation of any archaeological materials encountered. The daily monitoring logs shall at a minimum include the following:

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, 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., HBEP-MB-123.
- Description.
- Measurements.
- Universal Transverse Mercator 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.
- 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).

If requested by the CPM, 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.

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.

- Contain completed DPR 523A forms for all artifacts recorded or collected in that month shall be submitted as one combined PDF that includes an index and bookmarks. 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). 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.
- 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.

Verification:

1. 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.
2. While monitoring is on-going and as required by the CPM, the project owner shall submit each day's monitoring logs and cover sheet merged into one PDF document by email within 24 hours.
3. 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.
4. If resources are discovered as outlined in this condition of certification, the project owner shall notify all local Native American groups of the discovery of the resource within 48 hours of its discovery. If resources are discovered as outlined in this condition of certification, the project owner shall appoint one or more NAMs. 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 CPM. The project owner shall include a copy of this condition of certification in any response letter.
5. While monitoring is on-going, the project owner shall include in each MCR a copy of the monthly summary of cultural resources related monitoring prepared by the CRS and shall attach any new DPR 523A forms completed for finds treated prescriptively, as specified in the CRMMP.

6. 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.
7. 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 detailing the CRS's justification for changing the monitoring level.
8. 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

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 younger, 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, section 7050.5(b) and 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 on other areas of the project site, 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:

1. The CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday, and 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/NRHP eligibility, and recommendations for data recovery from any cultural resources discoveries, whether or not a determination of CRHR/NRHP 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.
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, the CRS shall survey the borrow or disposal site(s) for cultural resources and record on DPR 523 forms any that are identified. This survey shall not be required if there is a survey of the location that is less than five years old and if the site is approved by the CPM.

When any non–commercial borrow site or non-commercial disposal site survey is completed, the CRS shall convey the results and recommendations for further action to the project owner and the CPM. The CPM shall determine, in his/her sole discretion, whether significant archaeological resources that cannot be avoided are present at the borrow or disposal site. If the CPM determines that significant archaeological resources that cannot be avoided are present at the borrow or disposal 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.

GEOLOGY AND PALEONTOLOGY

GEO-1 SOILS ENGINEERING REPORT REQUIRED

A Soils Engineering Report, as required by Section 1803 of the California Building Code (CBC 2013), shall specifically include laboratory test data, associated geotechnical engineering analyses, and a thorough discussion of seismicity; liquefaction; dynamic compaction; compressible soils; corrosive soils; and tsunami. In accordance with CBC 2013, the report should also include recommendations for ground improvement and/or foundation systems necessary to mitigate these potential geologic hazards, if present. The project owner shall conduct a geotechnical investigation that identifies expected dewatering volumes and the spatial extent of drawdown effects of that dewatering. If the investigation shows that dewatering is likely to affect nearby wetlands or environmentally sensitive habitat areas, mitigation measures shall be incorporated into the final design plans required pursuant to Condition of Certification GEN-2.

Verification: The project owner shall include in the application for a grading permit 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 tsunami, and a summary of how the results of the analyses were incorporated into the project foundation and grading plan design for review and comment by the chief building official (CBO). A copy of the Soils Engineering Report, application for grading permit, and any comments by the CBO are to be provided to the CPM at least 30 days prior to grading.

GEO-2 COMPLIANCE WITH CITY OF HUNTINGTON BEACH MUNICIPAL CODE SECTION 17.04.085.

The project owner shall comply with the requirements of Huntington Beach Municipal Code Section 17.04.085 to ensure the existing and previously identified abandoned gas well on the site, and any additional wells that may be identified during grading and construction, are appropriately mitigated and made safe. The project owner shall consult with the Fire Chief to determine whether any of the following requirements of the municipal code apply, and shall submit the recommendations of the Fire Chief to the CPM for review and approval.

If ~~As~~ required, the permit shall specifically include:

1) a site soil testing plan capable of detecting the presence of methane in the near surface soils,

2) field testing as specified in the approved plan,

3) laboratory test data,

4) pre-site disturbance mitigation if high concentrations of methane are discovered during testing,

5) site audits, and

6) area well documentation and review.

In accordance with city Specification No, 429, the permit shall also include designs for recommended methane control systems necessary to mitigate these potential hazards, if present.

Verification: The project owner shall include in the application for a Methane District Building Permit a copy of the construction project Site Plan Review approved by the California Department of Conservation Division of Oil, Gas and Geothermal Resources (DOGGR) that is on file with the Huntington Beach Fire Department PetroChem section. A copy of the site plan review, application for the Methane District Building Permit and any comments by Huntington Beach Fire Chief are to be provided to the CPM at least 30 days prior to initiation of grading.

GEO-3 TSUNAMI HAZARD MITIGATION PLAN

The project owner shall ensure that all staff and visitors at the project site are informed of tsunami hazards in the region and have been shown how and where to evacuate the site if there is potential for a tsunami to affect public health and safety at the site. The project owner shall ensure that the information provided to staff and visitors complies with the recommendations and procedures provided by the city of Huntington Beach or Orange County.

The project owner shall provide a Tsunami Hazard Mitigation Plan (THMP) to the compliance project manager (CPM) for review and approval.

The THMP shall include:

A. A general discussion of tsunami hazard and the public safety risk they present at the site.

B. Identification of what tsunami hazards exist specific to the project site and how the project owner proposes to ensure compliance with applicable hazard response plans.

C. A discussion of criteria for a response to ensure public safety for a tsunami event and show where on and offsite refuge can be accessed, and evacuation routes.

D. Identification of any site modifications or signage that may be needed to show how and where refuge is accessible.

E. The THMP shall also include a training program for visitors and workers, which could be incorporated with other safety training programs such as those required in WS-1 and WS-2. The purpose of

training is to inform workers and visitors how to respond to tsunami hazards and where they may obtain refuge in the event it is determined it is necessary to evacuate the project site. The project owner may include the training for tsunami hazard response as a part of the Worker Environmental Awareness Program required in PAL-4 below. The training shall include:

1. **Information on who and how staff and visitors will be notified that there is a potential for a tsunami event to impact the site and how they should respond;**

2. **Graphics showing methods of seeking refuge and routes for evacuation of the site;**

3. **A certification of completion form signed by each worker indicating that he/she has received the training; and**

4. **Submittal of 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 training.**

The THMP shall be updated if the city of Huntington Beach or Orange County updates their tsunami response plan. When there is an update to hazard response plans, the project owner shall submit for CPM approval an updated THMP showing how the project owner proposes to comply.

Verification: The project owner shall submit the THMP 60 days prior to ground disturbance for CPM review and approval. The project owner shall submit any subsequent updates to the THMP to the CPM within 90 days of an update to an applicable THMP.

PAL-1 APPOINTMENT AND QUALIFICATIONS OF PALEONTOLOGICAL RESOURCE SPECIALIST (PRS)

The project owner shall provide the compliance project manager (CPM) with the resume and qualifications of its paleontological resource specialist (PRS) for review and approval. If the approved PRS is replaced prior to completion of project mitigation and submittal of the paleontological resources report (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). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM for review and approval.

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

As determined by the CPM, the PRS shall meet the minimum qualifications for a 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;

2. Ability to recognize and collect fossils in the field;

3. Local geological and biostratigraphic expertise;

4. Proficiency in identifying vertebrate and invertebrate fossils; and

5. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.

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

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

The project owner shall keep resumes on file for qualified paleontological resources monitors (PRMs). If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM for review and approval.

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

Verification:

(1) At least 60 days prior to **the start of** ground disturbance, the project owner shall submit **a**~~the~~ resume **and statement** of **availability of its designated PRS** ~~the proposed PRS, with at least three references and contact information, to the CPM~~ for **on-site work to the CPM, whose**~~review and~~ approval **must be obtained**.

The CPM may withhold approval of a PRS based upon proof that a proposed PRS has repeatedly failed to comply with the conditions of any Energy Commission license as they pertain to paleontological resources. If the project owner

proposes to use a PRS previously-approved by the Energy Commission within the preceding five (5) years, the CPM shall have ten (10) business days to review the resume and statement of availability of the proposed PRS. The CPM may withhold approval of a previously-approved PRS only if (1) the non-compliance with conditions of an Energy Commission license was documented in the compliance record for the previous Energy Commission license project work or (2) if the proposed previously approved PRS's qualifications are not commensurate with all of the minimum qualifications identified in Condition of Certification PAL-1. The CPM shall provide notice of disapproval of the proposed PRS within ten (10) days of receipt of the resume and statement of availability of any proposed PRS. In the case of a previously-approved PRS, failure to provide notice within (10) days of receipt of the resume and statement of availability of the proposed PRS shall be deemed approval of that candidate.

The CPM shall meet and confer with the project owner regarding the disapproval of a previously-approved PRS or the need to remove or replace a PRS. Removal or replacement may occur if the CPM can establish that the PRS has repeatedly failed to comply with the conditions of the Amended HBEP license that pertain to paleontological resources.

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

(3) Prior to any planned change in the PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

~~The project owner may replace a PRS by submitting the required resume, references and contact information to the CPM at least ten 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.~~

PAL-2 DOCUMENTS PROVIDED TO THE PRS

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

should 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 or 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 5 days of identifying the changes.

PAL-3 PALEONTOLOGICAL RESOURCES MONITORING AND MITIGATION PLAN (PRMMP)

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, and sampling 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 monitor, the project owner's on-site manager, and the CPM.

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

1. Assurance that the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, 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 identified within 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;

6. 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, which meet the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources;

9. 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; and

10. A copy of the paleontological conditions of certification.

Verification: At least 30 days prior to ground disturbance, the project owner shall provide a copy of the PRMMP to the CPM. 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 PREPARATION OF WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

Prior to ground disturbance the project owner and the PRS shall prepare 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**al** resources and identify procedures they should follow to ensure there are no impacts to sensitive paleontologic**al** resources. The WEAP shall include:

1. A discussion of applicable laws and penalties under the law;

2. Good quality photographs or physical examples of vertebrate fossils for project sites containing units of high paleontologic**al** sensitivity;

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; and

7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

The project owner shall also 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**al** 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, 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.

(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.

PAL-5 WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP) TRAINING

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 kick-off and 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 who operate ground-disturbing equipment or tools. Following project kick-off, a CPM-approved video or in-person training may be used for new employees. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. A WEAP certification of completion form shall be used to document who has received the required training.

Verification:

(1) In the Monthly Compliance Report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (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 DUTIES OF THE PRS AND PRM

The project owner shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading, excavation, trenching, and augering 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 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:

1. 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, and copies of these logs shall be submitted with the MCR. 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, when construction has been stopped because of a paleontological find.

The project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities that will be included in each MCR. The summary will include the name(s) of PRS or PRM(s) active during the month, general descriptions of training and monitored construction activities, and general locations of excavations, grading, 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 will address any issues or concerns about the project relating to paleontologic**al** 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: The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 10 days in advance of any proposed changes in monitoring different from that identified in the PRMMP. 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 PALEONTOLOGICAL RESOURCES REPORT (PRR)

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.

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 DISPOSITION OF FOSSIL MATERIAL

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.

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

LAND USE

LAND-1 The project owner shall comply with Appendix B(g)(3)(c) of the Siting Regulations (Title 20, California Code of Regulations) by ensuring that the **Amended** HBEP site, excluding linear and temporary lay down or staging areas, will be located on a single legal parcel.

Verification: Prior to ~~construction of the first power block~~ **commercial operation of the combined-cycle gas turbine (CCGT)**, the project owner shall submit evidence to the compliance project manager (CPM), indicating approval of a Lot Line Adjustment, **or other action** by the city of Huntington Beach, establishing a single parcel for the ~~28.6~~ - ~~acre HBEP site~~ **CCGT power block and relate facilities**. The submittal to the CPM shall include evidence of compliance with all conditions and requirements associated with the approval of the Lot Line Adjustment, **or other action** by the city **of Huntington Beach**. **Prior to construction of the second power block, the project owner shall submit evidence to the CPM indicating approval of a Lot Line Adjustment, or other action by the city of Huntington Beach, establishing a single parcel for the 30-acre HBEP site. The submittal to the CPM shall include evidence of compliance withal conditions and requirements associated with the approval of the Lot Line Adjustment or other action by the city of Huntington Beach.**

TRAFFIC & TRANSPORTATION

TRANS-1 ROADWAY USE PERMITS AND REGULATIONS

The project owner shall apply to each jurisdiction along the route of travel from the Port of Long Beach to the **Alamitos Generating Station (**AGS**)** and/or project site for all necessary transportation permits and shall comply with all conditions imposed by the California Department of Transportation (Caltrans) and other relevant jurisdictions, including, but not limited to, Orange County, Los Angeles County, and the cities of Huntington Beach, Long Beach, and Seal Beach, on vehicle sizes and weights, driver licensing, and truck routes.

Verification: In the Monthly Compliance Reports (MCRs), the project owner shall submit copies of all applications submitted and any permits received during that reporting period to the Compliance Project Manager (CPM) In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

TRANS-2 RESTORATION OF ALL PUBLIC ROADS, EASEMENTS, AND RIGHTS-OF-WAY

The project owner shall restore all public rights-of-way, including but not limited to streets, highways, roads, easements, and intersections, that have been damaged due to project-related construction and demolition activities. Restoration of significant damage which could cause hazards (such as potholes) must take place immediately after the damage has occurred. The restoration shall be completed in a timely manner to the road's original condition in compliance with the applicable jurisdiction's standards.

Verification: Prior to the start of site mobilization, the project owner shall photograph or videotape all public rights-of-way segments that may be affected by project-related traffic. The project owner shall provide the photograph or videotape to the CPM and the affected local jurisdiction(s). The project owner shall coordinate with each jurisdiction regarding planned improvement activities on affected public rights-of- way.

If damage to public roads, easements, or rights-of-way occurs ~~is detected~~, the project owner shall notify the CPM and shall enter into an agreement with each affected local jurisdiction for implementing a roadway repair/rehabilitation program, including any necessary repairs before the end of construction. At a minimum, roads damaged by construction and demolition activities shall be repaired to a structural condition equal to that which existed prior to construction and demolition activity. Following completion of any public right-of-way repairs, the project owner shall provide proof to the CPM from each affected jurisdiction of its satisfaction with the repairs.

TRANS-3 TRAFFIC CONTROL PLAN

The project owner shall prepare and implement a Traffic Control Plan (TCP) for the HBEP's construction and operations traffic. The TCP shall address the movement of workers, vehicles, and materials, including arrival and

departure schedules ~~and~~**,** designated workforce ~~and~~**,** delivery routes**, and the operations of shuttle(s) from offsite parking areas**. The project owner shall consult with Caltrans and all applicable local jurisdictions, including, but not limited to, Orange County, Los Angeles County, and the cities of Huntington Beach, Long Beach, and Seal Beach, in the preparation and implementation of the ~~Traffic Control Plan (~~TCP~~)~~. The project owner shall submit the proposed TCP to Caltrans and applicable local jurisdictions in sufficient time for review and comment, and to the CPM for review and approval prior to the proposed start of demolition and construction and implementation of the plan.

The Traffic Control Plan ~~(TCP)~~ shall include:

1. Provisions for redirection of construction traffic with a flag person as necessary to ensure traffic safety and minimize interruptions to non-construction related traffic flow,

2. Placement of necessary signage, lighting, and traffic control devices at the project construction site and lay-down areas;

3. A heavy-haul plan addressing the transport and delivery of heavy and oversized loads requiring permits from the California Department of Transportation (Caltrans), other state or federal agencies, and/or the affected local jurisdictions including Los Angeles county, Orange county, city of Long Beach, city of Seal Beach, and city of Huntington Beach;

4. Location and details of construction along affected roadways at night, where permitted;

5. Temporary closure of travel lanes or disruptions to street segments and intersections during construction activities;

6. Traffic diversion plans (in coordination all applicable local jurisdictions and Caltrans) to ensure access during temporary lane/road closures;

7. Access to residential and/or commercial property located near construction work and truck traffic routes;

8. Assurance of access for emergency vehicles to the project site;

9. Advance notification to residents, businesses, emergency providers, and hospitals that would be affected when roads may be partially or completely closed;

10. Identification of safety procedures for exiting and entering the site access gate;

11. Parking/Staging Plan for all phases of project construction and operation to require all project-related parking to be on-site or in designated off-site

parking areas. **The Parking/Staging Plan shall identify operation time(s) and route(s) for shuttle(s) from offsite parking areas.** The Parking/Staging Plan shall prohibit use of the Huntington Beach City parking area unless the CPM determines that there are insufficient parking spaces available at the other parking facilities identified in this Decision.

Verification: At least 60 calendar days prior to the start of construction, the project owner shall submit the TCP to the applicable agencies 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 agencies 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 agencies, along with any changes to the proposed development plan, to the CPM for review and approval.

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 or its contractor(s) shall coordinate with all relevant jurisdictions, including, but not limited to, Orange County, Los Angeles County, and the cities of Huntington Beach, Long Beach, and Seal Beach, and Caltrans, to obtain all required encroachment permits and comply with all applicable regulations.

Verification: At least 10 days prior to ground disturbance or interruption of traffic in or along any public road, easement, or right-of-way, the project owner shall provide copies of all permit(s) received from Caltrans or any other affected jurisdiction/s to the CPM. In addition, the project owner shall retain copies of the issued/approved permit(s) and supporting documentation in its compliance file for a minimum of 6 months after the start of commercial operation.

TRANS-5 HAZARDOUS MATERIALS

The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol, Caltrans and all other relevant jurisdictions for the transport of hazardous materials.

Verification: The project owner shall include in the MCRs copies of all permits/ licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances during that reporting period.

TRANS-6 OBSTRUCTION MARKING AND LIGHTING

The project owner shall install blinking obstruction marking and lighting on any construction equipment that exceeds 200 feet in height in accordance with FAA requirements, as expressed in the **FAA Advisory Circular 70/7460-1L (or current circular in effect).** ~~following documents:~~

~~o FAA Advisory Circular 70/7460-1K~~

~~o FAA Safety Alert for Operators (SAFO) 09007.~~

Lighting shall be operational 24 hours a day, 7 days a week for the duration of project construction. Upgrades to the required lighting configurations, types, location, or duration shall be implemented consistent with any changes to FAA obstruction marking and lighting requirements.

Verification: At least 60 days prior to the presence of any construction equipment which exceeds 200 feet in height, the project owner shall submit to the CPM for approval final design plans for construction equipment depicting the required air traffic obstruction marking and lighting.

~~At least 60 days prior to plant operation, the project owner shall install of permanent obstruction marking and lighting consistent with FAA requirements and shall inform the CPM in writing within 10 days of installation. The lighting shall be inspected and approved by the CPM (or designated inspector) within 30 days of installation.~~

~~At least 10 days prior to installation of permanent obstruction marking and lighting, the project owner shall provide the CBO and CPM proof in writing of approval by the FAA for all structure marking and lighting.~~

TRANS-7 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 HBEP and recommending avoidance of overflight of the project site below ~~1,740~~ **2,200** feet AGL. The letter should also request that the NOTAM be maintained in active status until all navigational charts and Airport Facility Directories (AFDs) have been updated.
- Submit a letter to the FAA requesting a power plant depiction symbol be placed at the HBEP site location on the **Los Angeles**~~San Diego~~ Sectional Chart with a notice to “avoid overflight below ~~1,740~~ **2,200** feet AGL”.
- **Submit a letter** ~~R~~**r**equest**ing** that Southern California **Terminal Radar Approach Control (**TRACON**)** submit aerodrome remarks describing the location of the HBEP plant and advising against direct overflight below ~~1,740~~ **2,200** feet AGL to the:
- FAA ~~AeroNav Services, formerly the FAA National Aeronautical Charting Office (~~Airport/Facility Directory~~)~~ **- Southwest U.S.**
- Jeppesen Sanderson Inc. (~~JeppGuide Airport Directory,~~**Airway Manual Services -** Western ~~Region~~ **U.S. Airport Directory**)
- ~~**Airguide Publications (Flight Guide, Western States)**~~ **Pilot's Guide to California Airports**

Verification: Within 30 days following the start of construction, the project owner shall submit draft language for the letters of request to the FAA ~~(including~~ **and** Southern California TRACON~~)~~ to the CPM for review and approval.

Within ~~At least~~ 60 days ~~prior to the start of operations,~~ **after CPM approval of draft language for the letters of request to the FAA and Southern California TRACON,** the project owner shall submit the required letters of request to the FAA and ~~request that~~ **to** Southern California TRACON **to** submit aerodrome remarks to the listed agencies. 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 project owner does not receive a response from any of the above agencies within 45 days of the request (or by 15 days prior to the start of operations) the project owner shall follow up with a letter to the respective agency/ies to confirm implementation of the request. A copy of any resulting correspondence shall be submitted to the CPM within 10 days of receipt.

The project owner shall contact the CPM within 72 hours if notified that any or all of the requested notices cannot be implemented. Should this occur, the project owner shall appeal such a determination, consistent with any established appeal process and in consultation with the CPM. A final decision from the jurisdictional agency denying the request, as a result of the appeal process, shall release the project owner from any additional action related to that request and shall be deemed compliance with that portion of this condition of certification.

TRANS-8 CONSTRUCTION WORKER PARKING/CONSTRUCTION LAYDOWN ACCESS

The project owner shall provide the engineering plan/drawings for the design and reconfiguration of the Magnolia/Banning intersection (signal and street striping/signage), including the grading and civil engineering to construct a two-lane entrance road into the All-American Plains Tank (Plains) former oil storage site to the city of Huntington Beach Public Works Department for review and comment, and to the CBO for review and approval.

The project owner shall provide the engineering plan/drawings for the design and configuration of entrances and a pedestrian crossing for the Newland Street construction parking area to the City of Huntington Beach Public Works Department for review and comment, and to the CBO for review and approval.

Verification: At least three (3) months prior to construction of the intersection reconfiguration, the project owner shall provide the engineering plan/drawings for the design and reconfiguration of the Magnolia/Banning intersection and entrance road into the Plains site and the design and configuration of entrances to the City of Huntington Beach Public Works Department for review and comment and to the CBO for review and approval.

At least three (3) months prior to use of the Newland Street construction parking area, the project owner shall provide the engineering plan/drawings for the design and reconfiguration of the pedestrian crossing to the City of Huntington Beach Public Works Department for review and comment and to the CBO for review and approval.

TRANS-9 REPLACEMENT OF STREET PARKING DUE TO RECONFIGURATION OF MAGNOLIA/BANNING INTERSECTION

If existing street parking on Magnolia Street is reduced as a result of the project's reconfiguration of the Magnolia/Banning intersection and the construction of the new entrance to the Plains site, the project owner shall replace the loss of street parking on a one-for-one basis within "walking distance" of the displaced parking spaces as required by Section 231.28 of the City of Huntington Beach Zoning Code. Replacement parking shall be assured before removal of any existing parking to ensure no reduction in available parking spaces.

Verification: At least 10 days prior to reduction of existing street parking, the project owner shall submit a parking replacement plan to the City of Huntington Beach for review and comment, and submit to the CPM for review and approval. The plan shall identify the number and location of parking spaces to be removed and the number and location of parking spaces to be replaced.

SOCIOECONOMICS

SOCIO-1 The project owner shall pay the one-time statutory school facility development fees to the Huntington Beach Union High School District as required by Education Code Section 17620.

Verification: At least 30 days prior to the start of project construction, the project owner shall provide to the Compliance Project Manager (CPM) proof of payment to the Huntington Beach Union High School District of the statutory development fee.

SOCIO-2 The project owner shall pay the following one-time Development Impact Fees to the city of Huntington Beach as required by Chapter 17 of the Huntington Beach municipal code:

- Police Facilities Development Impact Fees
- Parkland Acquisition and Park Facilities Development Impact Fees

Verification: At least 90 days prior to the start of commercial operation, the project owner shall confer with the CEC's assigned Chief Building Official (CBO) for HBEP to calculate the applicable one-time development impact fee(s) as set forth in Chapter 17 of the Huntington Beach Municipal Code. At least 30 days prior to commercial operation, the project owner shall provide to the CPM proof of payment to the city of Huntington Beach of the required Development Impact Fee(s).

NOISE AND VIBRATION

NOISE-1 PUBLIC NOTIFICATION PROCESS

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, or a similarly effective 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.

Verification: 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-2 NOISE COMPLAINT PROCESS

- Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all legitimate project-related noise complaints[4]. The project owner or authorized agent shall:
- Use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each project-related noise complaint;
- Attempt to contact the person(s) making the noise complaint within 24 hours;
- Conduct an investigation to determine the source of noise in the complaint;

[4] A legitimate complaint refers to a complaint about noise that is caused by the HBEP project as opposed to another source (as verified by the CPM). A legitimate complaint constitutes a violation by the project of any noise condition of certification (as confirmed by the CPM), which is documented by an individual or entity affected by such noise.

- 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 states that the noise problem has been resolved to the complainant's satisfaction.

Verification: Within five days of receiving a legitimate noise complaint[5], 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.

NOISE-3 EMPLOYEE NOISE CONTROL PROGRAM

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 to the applicable OSHA and Cal-OSHA standards.

Verification: 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.

NOISE-4 NOISE RESTRICTIONS

The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the operation of the project will not cause the noise levels due to normal steady-state plant operation alone, to exceed an hourly average of 61 dBA L_{50} measured at or near monitoring location M2.

Also, the project design and implementation shall include appropriate noise mitigation measures adequate to ensure that the operation of the project will not cause the noise levels due to plant operation alone, during the four quietest consecutive hours of the nighttime, to exceed an average of 45 dBA L_{90} measured at or near monitoring location M3 and an average of 49 dBA L_{90} measured at or near monitoring location M4.

No new pure-tone components (as defined in **Noise Table A1**, below) shall be caused by the project. No single piece of equipment shall be

[5] For the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**.

allowed to stand out as a source of noise that draws legitimate complaints[6].

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 M2, M3 and M4, or at a closer location acceptable to the CPM and include L_{50} and L_{90} 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 purposes of demonstrating compliance with this condition of certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) 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 at the affected receptor sites exceed the above values, 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 complies with **Noise Table A1**, below.

Verification: The above noise survey shall be conducted in two parts. Part one shall take place within 90 days of Power Block 1 (PB-1) first achieving a sustained output of 85 percent or greater of its rated capacity. Part 2 of this survey shall be performed within 90 days of Power Block 2 (PB-2) first achieving 85 percent or greater of its rated capacity and shall include the combined operation of PB-1 and PB-2 at 85 percent or greater of the overall plant rated capacity with all turbine generators operating. The exception to the above is that for the daytime portions of the survey only (between 7:00 a.m. and 10:00 p.m.) the above rated capacity can be 80 percent or higher rather than 85 percent or higher.

Within 15 days after completing each part, 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

[6] ~~For the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**.~~

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.

NOISE-5 OCCUPATIONAL NOISE SURVEY

Following PB-1's attainment of a sustained output of 90 percent or greater of its rated capacity, the project owner shall conduct an occupational noise survey to identify any noise hazardous areas in the facility. Following PB-2's attainment of a sustained output of 90 percent or greater of its rated capacity, the project owner shall repeat this survey.

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 applicable California and federal regulations.

Verification: 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.

NOISE-6 CONSTRUCTION RESTRICTIONS

Heavy equipment operation and noisy[~~7~~**3**] construction work relating to any project features, including **construction staging and warm-up activities at the Plains All-American Tank Farm (Plains) site and** pile driving, shall be restricted to the times delineated below:

Mondays through Saturdays: 7:00 a.m. to 8:00 p.m.

Sundays and Federal Holidays: Construction not allowed

Limited construction activities may be performed outside of the above hours, with CPM approval as set forth below.

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.

[~~7~~**3**] ~~Noise~~ **"Noisy" means noise** that draws legitimate complaint (for the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**)

Truck engine exhaust brake use (jake braking) shall be limited to emergencies.

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

In consultation with the CPM, construction equipment generating excessive noise[8~~4~~] **at the AHBEP site and at the Plains site** shall be updated or replaced if beneficial in reducing the noise and if feasible. In addition, temporary acoustic barriers shall be installed around stationary construction noise sources if beneficial in reducing the noise and if feasible. The project owner shall reorient construction equipment, and relocate construction staging areas, when possible, to minimize the noise impact at nearest noise-sensitive receptors. **All construction-related activities at the AHBEP site and at the Plains site shall be performed in a manner to avoid excessive noise and reduce the potential for noise complaints as much as practicable.**

At least 10 days prior to any heavy equipment operation or noisy[9] construction activities that would occur outside of the above hours, the project owner shall submit a request to the CPM for review and approval and simultaneously send a copy to the City of Huntington Beach for review and comment. The project owner shall provide a copy of the transmittal letter to the City of Huntington Beach soliciting review and comment to the CPM.

The request submitted to the CPM shall specify the activities that need to occur outside of the restricted days and times set forth above; the need for such activities; the days, dates, and times during which these activities will occur; the approximate distance of activities to residential and sensitive receptors; the expected sound levels at these receptors; and a statement that the activities will be performed in a manner to ensure excessive noise is prohibited as much as practicable. At the same time, the project owner shall notify the residents and property owners within one-half mile of the project site of the request. In this notification, the project owner shall state that it will perform this activity in a manner to ensure excessive noise is prohibited as much as practicable.

The project owner shall not perform any heavy equipment operation or noisy[10] construction activities outside of the timeframes set forth above until the CPM has granted the request for exemption. If the exemption is granted, the project owner shall notify the residents and property owners within one-half mile of the project site of

[8~~4~~] ~~Noise~~ **"Excessive noise" means noise** that draws a legitimate complaint (for the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**)

[9] ~~Noise that draws legitimate complaint (for the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**)~~

[10] ~~Noise that draws legitimate complaint (for the definition of "legitimate complaint", see the footnote in Condition of Certification **NOISE-2**)~~

the approval of the request. The project owner shall provide copies to the CPM of all transmittal letters to property owners and residents.

NOISE-7 STEAM BLOW RESTRICTIONS

If a traditional, high-pressure steam blow process is used the project owner shall equip steam blow piping with a temporary silencer that quiets the noise of steam blows to no greater than 89 dBA measured at a distance of 50 feet. The steam blows shall be conducted between 8:00 a.m. and 6:00 p.m. A new high-pressure steam blow shall not be initiated after 5:00 p.m. If a low-pressure, continuous steam blow process is used, the project owner shall submit to the CPM a description of the process, with expected noise levels and planned hours of steam blow operation.

Verification: At least 15 days prior to the first steam blow, the project owner shall notify all residents or business owners within one mile of the project site boundary. The notification may be in the form of letters, phone calls, fliers, or other effective means, as approved by the CPM. The notification shall include a description of the purpose and nature of the steam blow(s), the planned schedule, expected sound levels, and explanation that it is a one-time activity and not part of normal plant operation.

NOISE-8 PILE DRIVING MANAGEMENT

The project owner shall perform pile driving in a manner to reduce the potential for any legitimate noise complaints. The project owner shall notify the residents in the vicinity of pile driving prior to start of pile driving activities.

Verification: At least 15 days prior to first 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 locations M2-M4.

At least 10 days prior to first production pile driving, the project owner shall notify the residents within one-half 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 legitimate noise 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.

VISUAL RESOURCES

VIS-1 VISUAL SCREENING AND ENHANCEMENT PLAN FOR PROJECT STRUCTURES – PROJECT OPERATION

Prior to **the start of construction** ~~submitting the master drawings and master specifications list for the project to the Chief Building Official (CBO) and the Compliance Project Manager (CPM)~~, the project owner shall prepare and submit a **Preliminary** Visual Screening and Enhancement Plan for Project Structures (**Preliminary** Plan) that includes methods and materials to visually screen and treat surfaces of publicly visible power plant structures.

The Preliminary Plan shall include:

- **Revised general arrangement/site plan to scale showing locations of and corridor spaces for the architectural screens/sphere walls.**
- **Information on how the architectural screens will comply with City Specification No. 401 and achieve consistency with the City's adopted Resolution No. 2016-27.**
- **Identity of the design firm that will plan and implement the architectural screening plan.**
- **Information on how surfaces of the 50-foot-tall acoustical wall, air cooled condenser, and exhaust stacks will be treated to coordinate visually with the architectural screens.**
- **Visual simulations using key observation points (KOPs) 1, 4, and 5 to accurately represent views of the architectural screens depicted on the site plan.**

~~(Condition of Certification **GEN-2** in the Facility Design section of the Commission Decision addresses requirements pertaining to the master drawings and master specifications list.)~~

Prior to the start of commissioning the combined-cycle gas turbine (CCGT) units, the project owner shall prepare and submit a Detailed Visual Screening and Enhancement Plan (Detailed Plan) that ~~The submitted Plan will~~ include**s** evidence of review by a California-licensed structural or civil engineer and an assessment of the feasibility and structural integrity of the architectural and decorative screening elements contained in the **Detailed** Plan. The California-licensed engineer shall review and sign the **Detailed** Plan. Any design changes recommended by the California-licensed engineer to ensure the structural soundness and safety of the project and the architectural design elements shall be incorporated in the **Detailed** Plan before its submittal to the **compliance project manager (**CPM**)**.

The project owner shall not submit instructions for architectural screens and other structures and colors and finishes to manufacturers or vendors of project structures, or perform final field treatment on any structures, until

written approval of the final **Detailed** Plan is received from the CPM. Modifications to the final **Detailed** Plan shall not occur without the CPM's approval.

The ~~Visual Screening and Enhancement~~ **Detailed** Plan ~~for Project Structures~~ shall be consistent with **Resolution No. 2016-27 adopted by the City of Huntington Beach City Council recommending visual enhancements for the site** ~~Resolution No. 2014-18 adopted by the City of Huntington Beach City Council on April 7, 2014 (TN #202084)~~. Surface treatments for publicly visible power plant structures shall be included in the **Detailed** Plan. Proposed surface treatments shall minimize the potential visual effects of glare from project surfaces. Methods to visually screen and enhance the project site shall visually unify the project to the extent practicable while maintaining compliance with **the** City**'s adopted resolution** ~~Resolution No. 2014-18~~.

The **transmission structures** ~~monopoles~~ for the on-site 230-kV transmission line shall have a surface treatment that enables them to blend with the environment to the greatest extent feasible, and the finish shall appear as a matte patina. Unpainted exposed lagging and surfaces of steel structures that are visible to the public shall be embossed or otherwise treated to reduce glare.

The **Detailed** Plan shall meet the following minimum content requirements:

- Inventory of major project structures, **sound/acoustical walls,** and buildings specifying the architectural and decorative screening structures and materials to visually screen and enhance those structures. The inventory shall specify height, length, and width or diameter for each major structure, and **an accurately** scale**d site** plan~~s~~ and elevation views shall be included in the Plan with architectural and project structures clearly identified.
- **Color brochures, color chips, and/or physical samples for each proposed** ~~List of~~ color~~s~~ and finish~~es~~ that will be applied to architectural screening structures and directly to power plant structures (e.g., paint scheme and finish types for the air cooled condenser**, the exhaust stacks, and the sound wall**). Proposed colors must be identified by vendor, name, and number, or according to a universal designation system. **Electronic files showing proposed colors may not be submitted in place of original samples.**
- **Physical sample of the plastic material that will be used to fabricate the spheres for the City's recommended sphere walls.**
- Electronic files and a set of print copies of 11-inch by 17-inch (or larger, if necessary) color visual simulations at life-size scale showing the architectural screening structures and surface treatments proposed for the project. ~~Key observation point (~~KOP~~)~~ 1, KOP 4, and KOP 5 shall be used

to prepare images showing the completed **Detailed** Visual Screening and Enhancement Plan for Project Structures. ~~Colors must be identified by vendor, name, and number, or according to a universal designation system.~~

- Schedule for completing construction of architectural and decorative screening structures and the surface treatments for publicly visible power plant structures during the construction timeline.
- Procedure and maintenance schedule to ensure that surface treatments and architectural structures are well maintained and consistent with the approved **Detailed** Plan for the life of the project.

~~**Supplement to the Visual Screening and Enhancement Plan for Project Structures.** Prior to submitting instructions and orders for architectural screening materials, prefabricated project structures, and paints and other surface treatments to manufacturers or vendors of project structures, the project owner shall submit a Supplement to the Visual Screening and Enhancement Plan for Project Structures (Supplement). The Supplement shall include color brochures, color chips, and/or physical samples showing each proposed color and finish that will be applied to architectural screening structures and directly to power plant structures. Electronic files showing proposed colors may not be submitted in place of original samples. Colors must be identified by vendor, name, and number, or according to a universal designation system.~~

Verification: At least ~~No more than~~ **60** ~~45~~ calendar days **prior to the start of construction** ~~before submitting the master drawings and master specifications list to the CBO (in accordance with the requirements of GEN-2)~~, the project owner shall submit a **Preliminary** Visual Screening and Enhancement Plan for Project Structures **(Preliminary Plan)** to the CPM for review and approval. The project owner shall, simultaneously with the submission to the CPM, submit seven copies of the ~~Visual Screening and Enhancement~~ **Preliminary** Plan to the City of Huntington Beach Planning and Building Department for review and comment.

A different time frame for submitting the Preliminary Plan is allowed by agreement between the project owner and the CPM.

~~At least 60 calendar days before submitting instructions or orders for architectural screening, prefabricated project structures, and paints and other surface treatment materials, the project owner shall submit a Supplement to the Visual Screening and Enhancement Plan for Project Structures simultaneously to the CPM for review and approval. Simultaneously with the submission to the CPM, the project owner shall submit seven copies of the Supplement text and one set of physical samples of paint colors and other surface treatments to the City's Planning and Building Department for review and comment.~~

If the CPM determines that the **Preliminary** Plan ~~and/or its Supplement~~ require**s** revisions, the project owner shall provide an updated version with the specified revision(s) for review and approval by the CPM. Copies of the revised **Preliminary** Plan

~~and/or the Supplement~~ (if ~~either~~ **it** is required) shall be provided to the City for review and comment. City staff requires seven copies of the revised Plan or Supplement.

The project owner shall provide the CPM with copies of the transmittal letters submitted to the City requesting timely reviews of the **Preliminary Plan**~~, the Supplement,~~ and any revisions. The City shall be allowed 30 calendar days following receipt of the stated plans to provide comments to the project owner and to the CPM ~~within 30 calendar days of receiving any of the stated plans~~. In the absence of comments within that timeframe, or a request from the City for an extension of time, the CPM may deem the **Preliminary** Plan~~, the Supplement,~~ and any revisions acceptable to the City.

~~At least 10 calendar days before commercial operation of Power Block 1, the project owner shall notify the CPM in writing with information on 1) the status of implementing the requirements set forth in the Visual Screening and Enhancement Plan for Project Structures and 2) a schedule for completing the remaining Plan requirements during the construction timeline. These steps shall be repeated for commercial operation of Power Block 2.~~

At least 60 calendar days before the start of commissioning the CCGT units, the project owner shall prepare and submit the Detailed Plan to the CPM for review and approval. The review, comment, and approval process for the Detailed Plan shall be exactly the same as described above for the Preliminary Plan.

~~The project owner shall schedule periodic site visits with the CPM to view progress on implementing the Plan. At a minimum, site visits shall be scheduled within 30 calendar days of commercial operation of Power Block 1 and again within 30 calendar days of commercial operation of Power Block 2.~~ **The Plan elements pertaining to screening and enhancement of the CCGT units** ~~The Plan~~ shall be ~~fully~~ implemented within **12 months of** ~~90 calendar days of completing demolition of the Huntington Beach Generating Station Units 1 and 2~~ **demolition of Units1 and 2. The Plan elements pertaining to screening and enhancement of the simple-cycle gas turbine (SCGT) units shall be implemented within 12 months of beginning commercial operation of the SCGT units.**

The project owner shall verify in writing when the **Detailed** Plan **elements pertaining to the CCGT units are** ~~is fully~~ implemented and the facility is ready for inspection. The project owner shall obtain **separate** written confirmation**s** from the CPM that the project complies with the **Detailed** Visual Screening and Enhancement Plan for Project Structures **following completion of Plan elements for the CCGT units and later for the SCGT units**.

The project owner shall provide a status report regarding maintenance of the architectural screens and surface treatments in the Annual Compliance Report for the project. At a minimum, the report shall include:

- Descriptions of the condition of the architectural screening structures and treated surfaces of publicly visible structures at the power plant site.

- Descriptions of major maintenance and painting work required to maintain the original condition of architectural screening structures and treated surfaces during the reporting year.
- Electronic photographs showing the results of maintenance and painting work.

VIS-2 PERIMETER SCREENING AND ON-SITE LANDSCAPE AND IRRIGATION PLAN – PROJECT OPERATION

The project owner shall prepare and implement a Perimeter Screening and On-site Landscape and Irrigation Plan (Plan) to screen views of power plant structures. The Plan shall achieve a goal to screen and soften views of the power plant from Magnolia Marsh, the Huntington Beach Wetlands & Wildlife Care Center, the Huntington By-The-Sea Mobile Estates and RV Park, Newland Street, Magnolia Street, and the Pacific Coast Highway.

The Plan shall be prepared with the direct involvement of a licensed professional landscape architect familiar with local growing conditions, suitable native and non-invasive plant species for the project area, and local availability of proposed species. The licensed landscape architect shall review and sign the Plan. Any changes recommended by the licensed landscape architect shall be incorporated in the Perimeter Screening and On-site Landscape and Irrigation Plan before its submittal to the CPM for approval. The Perimeter Screening and On-site Landscape and Irrigation Plan shall comply with the landscape and irrigation requirements of the City of Huntington Beach General Plan and the Huntington Beach Zoning & Subdivision Ordinance.

The submitted Plan shall show evidence of participation by a wildlife biologist qualified to comment on tree species proposed for planting adjacent to Magnolia Marsh and confirm that those species will minimize new opportunities for raptors to prey on special-status birds in the marsh.

~~Design and submittal of the~~ **The** Perimeter Screening and On-site Landscape and Irrigation Plan shall ~~occur after completion of the project's final general arrangement/site plan to~~ accurately show interior area constraints (e.g., paved interior site access and emergency response roads).

The Perimeter Screening and On-site Landscape and Irrigation Plan shall include construction of an 8-foot-tall decorative masonry wall to extend along the site boundary adjacent to the Huntington Beach Wetlands & Wildlife Care Center and parking lot and along Magnolia Marsh (i.e., the southwest-west and southeast-east boundaries). All existing exterior site perimeter chain-link fencing shall be replaced with an 8-foot-tall decorative masonry wall.

The project owner shall not purchase or order plants, landscape and irrigation supplies and materials, or construction materials for the masonry wall until written approval of the final Plan is received from the CPM. Modifications to the final Plan shall not occur without the CPM's approval.

The Perimeter Screening and On-site Landscape and Irrigation Plan shall meet the following minimum requirements:

- Provide a detailed landscape and irrigation plan at a scale of 1 inch to 40 feet (1:40) (or similar scale) listing proposed plant species, and installation sizes, quantities, and spacing. The plan shall include expected heights at 10 years and maturity and expected growth rates to maturity. To achieve year-round screening, the Plan shall emphasize the use of evergreen species. No new or replacement lawn areas shall be planted anywhere on the site interior.
- Proposed tree species shall be 24-inch box size unless the licensed landscape architect recommends a different size for a species. Except for areas where planting of new or replacement trees at the site periphery is infeasible (based on the final general arrangement/site plan), spacing of trees shall be sufficiently dense to ensure maximum screening by the tree canopy at maturity. Faster-growing tree species shall be included provided that those species are non-invasive and suited to the coastal environment.
- Proposed shrub species shall be selected to achieve maximum screening effectiveness. Shrubs planted inside the 8-foot-tall masonry wall along Magnolia Marsh shall be selected to achieve a mature height of 12 feet to 15 feet, with a goal to increase the effectiveness of visual screening provided by the wall. Shrubs shall be installed at 5-gallon size unless the licensed landscape architect recommends a different size for a species.
- Proposed tree species along the site boundary adjacent to Magnolia Marsh shall be selected with a goal to discourage perching by raptors and minimize predation on special-status birds. Tree species with branch and foliage characteristics that would not be attractive to perching raptors are preferred.
- Provide electronic files and sets of print copies of 11-inch by 17-inch (or larger, if necessary) color visual simulations at life-size scale showing the landscape plantings at the time of installation and 10 years after installation. Key observation point (KOP) 1, KOP 4, and KOP 5 shall be used to prepare the visual simulations.
- Provide discussions of plans and methods to efficiently irrigate landscape plantings to ensure their survival and maintain optimal growth rates.
- Provide a plan view of the project site that clearly shows the planting plan for the site and the existing and new 8-foot-tall decorative masonry walls along the exterior site perimeter. Details on the materials and design of the masonry wall shall be included in the plan.
- Provide a detailed schedule for completing installation of landscape plantings during the project construction schedule and the masonry walls along the site perimeter.
- Provide a procedure for maintaining and monitoring the landscape and irrigation system and replacing all unsuccessful plantings for the life of the project.

- Provide a table summarizing the project's conformance with the City's landscape screening and irrigation regulations, including applicable goals, objectives, and policies in the Urban Design Element, Circulation Element, and Coastal Element of the General Plan. The table shall include applicable chapters and sections of the Huntington Beach Zoning & Subdivision Ordinance, **including those** ~~as~~ identified in **Visual Resources Appendix-4** of the Final Staff Assessment **for the licensed project**.

Verification: At least 90 calendar days before the start of commissioning the CCGT units ~~No more than 45 calendar days after submitting the master drawings and master specifications list to the CBO (in accordance with the requirements of condition of certification **GEN-2**)~~, the project owner shall submit the Perimeter Screening and On-site Landscape and Irrigation Plan to the CPM for review and approval. The project owner shall, simultaneously with the submission to the CPM, submit seven copies of the Perimeter Screening and On-site Landscape and Irrigation Plan to the City of Huntington Beach Planning and Building Department for review and comment.

If the CPM determines that the Plan requires revision, the project owner shall provide an updated version with the specified revision(s) for review and approval by the CPM. The project owner shall simultaneously with the submission to the CPM submit seven copies of the revised Perimeter Screening and On-site Landscape and Irrigation Plan to the City of Huntington Beach Planning and Building Department for review and comment.

The project owner shall provide the CPM with copies of the transmittal letters submitted to the City requesting review of the Plan and any revisions. The City shall be allowed 30 calendar days following receipt of the stated plans to provide comments to the project owner and to the CPM. In the absence of comments within that timeframe, or a request from the City for an extension of time, the CPM may deem the Plan and any revisions acceptable to the City.

~~At least 10 calendar days before commercial operation of Power Block 1, the project owner shall notify the CPM in writing with information on 1) the status of implementing the requirements set forth in the Perimeter Screening and On-site Landscape and Irrigation Plan, and 2) a schedule for completing the remaining Plan requirements during the construction timeline. These steps shall be repeated for commercial operation of Power Block 2.~~

~~The project owner shall schedule periodic site visits with the CPM to view progress on implementing the Plan. At a minimum, site visits shall be scheduled within 30 calendar days of commercial operation of Power Block 1 and again within 30 calendar days of commercial operation of Power Block 2.~~ The Plan **elements that would screen and/or soften views of areas affected by construction of the CCGT units** shall be ~~fully~~ implemented ~~no less than 60 days before commercial operation of Power Block #1~~ **within 270 calendar days of beginning commercial operation of the CCGT units. Similarly, the Plan elements that would screen and/or soften views of areas affected by construction of the SCGT units shall be implemented within 180 calendar days of beginning commercial operation of the SCGT units.**

The project owner shall verify in writing when the Plan **elements for the area affected by construction of the CCGT units are** ~~is fully~~ implemented and the facility is ready for inspection. The project owner shall obtain **separate** written confirmation**s** from the CPM that the project complies with the **Perimeter Screening and On-site Landscape and Irrigation Plan following completion of Plan elements for the CCGT units and later for the SCGT units.** ~~Visual Screening and Enhancement Plan for Project Structures.~~

The project owner shall provide a status report describing landscape maintenance activities in the Annual Compliance Report for the project. At a minimum, the report shall describe:

- Overall condition of the landscape areas and irrigation system at the power plant site.
- Major activities that occurred during the reporting year, including replacement of dead or dying vegetation.
- Maintenance of the site periphery masonry wall and any other elements included in the plan.

VIS-3 LONG-TERM CONSTRUCTION SCREENING, LANDSCAPE PROTECTION, AND SITE RESTORATION PLAN – PROJECT DEMOLITION, CONSTRUCTION, AND COMMISSIONING

Prior to the start of site mobilization, the project owner shall prepare and implement a Construction Screening, Landscape Protection, and Site Restoration Plan **(Plan)** describing methods and materials that will be used during each project phase to screen project construction and parking areas and views of the project site from areas where construction activities have the potential to be visible during a phase. The ~~Construction Screening, Landscape Protection, and Site Restoration~~ Plan will describe methods and materials to identify and protect existing landscape trees and shrubs. The ~~Construction Screening, Landscape Protection, and Site Restoration~~ Plan will identify existing landscaped areas where plantings will be retained and where they will be permanently removed. The ~~Construction Screening, Landscape Protection, and Site Restoration~~ Plan will include provisions to restore areas where ground disturbance occurred during construction.

To minimize the adverse visual impacts of project construction during each project phase, the project owner shall install and maintain construction screening fencing along the perimeters of the project site areas where there could be views from public use areas of construction activities during a phase. The project owner will consult with the CPM to determine areas where screening fencing is required during a project phase or phases. Depending on the location of on-site construction work, the areas requiring screening include the perimeter of the wetland along the southeast-east site boundary, the west side perimeter of the project site on Newland Street, and the southwest-west perimeter of the site along the Huntington Beach Wetlands

Conservancy property. The screening fencing for the power plant site shall be no less than 12 feet tall.

Brightly-colored construction exclusion fencing shall be used on-site to clearly delineate areas where existing landscape plantings will be protected and retained.

Condition of Certification **VIS-2** includes construction of an 8-foot-tall decorative masonry wall to extend along the site boundary adjacent to the Huntington Beach Wetlands & Wildlife Care Center and the wetland. Upon commencement of construction of the masonry wall, the CPM shall allow the project owner to remove all construction screening fencing from those portions of the site boundary.

Screening fencing shall be installed to visually screen the open lots that will be used for parking on Newland Street across from the project site and along the Pacific Coast Highway (PCH) at Beach Boulevard. The screening fencing for the parking lots shall be no less than 6 feet tall and shall meet the City of Huntington Beach corner lot visibility requirements specified in Title 23, Chapter 230, "Site Standards," of the Huntington Beach Municipal Code (i.e., 25-foot by 25-foot corner visibility triangle).

The Construction Screening, Landscape Protection, and Site Restoration Plan shall provide color images showing options for site perimeter screening materials. All site perimeter screening fencing and construction exclusion fencing shall be well maintained and repaired or replaced as necessary for the duration of project demolition, construction, and commissioning.

When construction is finished, all evidence of construction activities shall be removed and disturbed areas restored to their original or better condition. The Construction Screening, Landscape Protection, and Site Restoration Plan shall describe the methods and schedule for the restoration work to occur.

The project owner shall not purchase or order any materials for site perimeter screening fencing until written approval of the final Construction Screening, Landscape Protection, and Site Restoration Plan is received from the CPM. Modifications to the Construction Screening, Landscape Protection, and Site Restoration Plan shall not occur without the CPM's approval.

Verification: At least 60 calendar days before the start of site mobilization, the project owner shall submit a Construction Screening, Landscape Protection, and Site Restoration Plan to the CPM for review and approval. Simultaneously with the submission of **the** ~~a Construction Screening, Landscape Protection, and Site Restoration~~ Plan to the CPM, the project owner shall submit seven copies of **the** ~~a Construction Screening, Landscape Protection, and Site Restoration~~ Plan to the City of Huntington Beach Planning and Building Department for review and comment.

If the CPM determines that the Plan requires revision, the project owner shall provide an updated version with the specified revision(s) for review and approval by the CPM.

Seven copies of the revised Plan shall be submitted to the City of Huntington Beach Planning and Building Department for review and comment.

The project owner shall provide the CPM with a copy of the transmittal letter submitted to the City requesting review of the Construction Screening, Landscape Protection, and Site Restoration Plan and any revisions. The City shall be allowed 30 calendar days following receipt of the stated plans to provide comments to the project owner and to the CPM. In the absence of comments within that timeframe, or a request from the City for an extension of time, the CPM may deem the Construction Screening, Landscape Protection, and Site Restoration Plan and any revisions acceptable to the City.

Before the start of ground disturbance at the project site, the project owner shall install site perimeter screening fencing and construction exclusion and parking area fencing at the locations agreed upon in consultation with the CPM. The project owner shall notify the CPM within 7 calendar days of installing the fencing that it is ready for inspection.

The project owner shall report any work required to repair or replace temporary screening and construction exclusion fencing in the Monthly Compliance Report for the project.

Within 10 calendar days of receipt of confirmation from the project owner that construction of the permanent 8-foot-tall masonry wall is ready to begin, the CPM shall notify the project owner that construction screening fencing can be removed from the portions of the site boundaries where the masonry wall will be erected.

Within 30 calendar days of ~~completing construction~~ **beginning commercial operation** of the ~~HBEP power blocks and buildings, including demolition of Huntington Beach Generating Station (HBGS) Units 1 and 2~~ **CCGT units**, the project owner shall notify the CPM in writing of the status of implementing the requirements set forth in the Construction Screening, Landscape Protection, and Site Restoration Plan. Such notification shall include a schedule for completing the Plan requirements. The Plan **elements pertaining to screening and restoring areas affected by construction of the CCGT units** shall be ~~fully~~ implemented within 180 calendar days of ~~completing demolition and construction~~ **beginning commercial operation of the CCGT units. Similarly, the Plan elements pertaining to screening and restoring areas affected by construction of the SCGT units shall be implemented within 180 calendar days of beginning commercial operation of the SCGT units.**

The project owner shall verify in writing ~~that~~ **when** the Plan **elements pertaining to the areas affected by construction of the CCGT units** are ~~is~~ implemented and **the site and** restored areas are ready for inspection. The project owner shall obtain **separate** written confirmation**s** from the CPM that the project complies with the Plan **following completion of Plan elements for the CCGT units and later for the SCGT units**.

VIS-4 LONG-TERM LIGHTING – PROJECT DEMOLITION, CONSTRUCTION, AND COMMISSIONING

Consistent with applicable worker safety regulations, the project owner shall ensure that lighting of on-site construction areas, construction worker parking

lots, and construction laydown areas minimizes potential adverse night lighting impacts by implementing the following measures:

- 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 construction worker parking lots and construction sites, including any security-related boundaries).
- 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.
- Task-specific lighting shall be used to the maximum extent practicable.
- Wherever and whenever feasible, lighting shall be kept off when not in use and motion sensors shall be used to the maximum extent practicable.
- The Compliance Project Manager (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 7 calendar days after the first use of fixed-position parking area and construction-related lighting for major HBEP construction milestones, the project owner shall notify the CPM that the lighting is ready for inspection. Verification is to be repeated for these three construction milestones:

- demolition of HBGS Unit 5 and east fuel oil tank and construction of ~~Power Block 1~~ **the combined-cycle gas turbine units**,
- construction of ~~Power Block 2~~ **the simple-cycle gas turbine units**, and
- demolition of HBGS Units 1 and 2 ~~and construction of Buildings 33 and 34~~.

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 a copy of the complaint report and resolution form to the CPM, 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.

VIS-5 LIGHTING MANAGEMENT PLAN – PROJECT OPERATION

Prior to **purchasing lighting equipment for** ~~commercial operation of~~ the HBEP ~~Power Block 1~~ **CCGT units**, the project owner shall prepare and implement a comprehensive Lighting Management Plan for the HBEP.

Consistent with applicable worker safety regulations, the project owner shall ensure the design, installation, and maintenance of all permanent exterior lighting such that light sources are not directly visible from areas beyond the project site, reflected 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 HBEP facility.

The project owner shall not purchase or order any lighting fixtures or apparatus until written approval of the final plan is received from the Compliance Project Manager (CPM). Modifications to the final Lighting Management Plan shall not occur without the CPM's approval.

The project owner shall meet these requirements for permanent project lighting:

- A Lighting Management Plan shall be prepared that integrates efficient technologies and designs into lighting systems. The plan shall include evidence that a certified lighting professional participated in plan preparation.
- 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) **or illumination of areas** beyond the project site.
- Exterior lighting shall be designed to minimize backscatter to the night sky to the maximum extent feasible.
- 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 worker safety, and to maximize energy savings.
- Lighting fixtures shall be kept in good working order and continuously maintained according to the original design standards.
- The CPM shall be notified of any complaints about permanent lighting at the project site. 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: At least **90** ~~60~~ calendar days before **purchasing permanent lighting equipment for** ~~commercial operation of Power Block 1~~ **the CCGT units and other project structures**, the project owner shall submit a comprehensive Lighting Management Plan to the CPM for review and approval. Simultaneously with the submission of the Lighting Management Plan to the CPM, the project owner shall submit seven copies to the City of Huntington Beach Planning and Building Department for review and comment.

If the CPM determines that the Plan requires revision, the project owner shall provide an updated version with the specified revision(s) for review and approval by the CPM. Seven copies of the revised Lighting Management Plan shall be provided to the City of Huntington Beach Planning and Building Department for review and comment.

The project owner shall provide the CPM with a copy of the transmittal letters to the City requesting review of the Lighting Management Plan and any plan revisions. The City shall be allowed 30 calendar days following receipt of the stated plans to provide comments to the project owner and to the CPM. In the absence of comments within that timeframe, or a request from the City for an extension of time, the CPM may deem the Lighting Management Plan and any revisions acceptable to the City.

Prior to the start of commercial operation of ~~Power Block 1~~ **the CCGT units**, the project owner shall notify the CPM in writing that installation of permanent lighting for ~~Power Block 1~~ **those units** 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. The project owner shall obtain written confirmation from the CPM that the project complies with the Plan.

Within 48 hours of receiving a complaint about permanent project lighting, the project owner shall provide a copy of the complaint report and resolution form to the CPM, 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.

VIS-6 LIGHTING MANAGEMENT PLAN, REVIEW AND LETTER REPORT – PROJECT OPERATION

Prior to **purchasing lighting equipment for** ~~commercial operation of~~ the HBEP ~~Power Block 2~~ **SCGT units**, the project owner shall conduct a full review of the approved Lighting Management Plan to determine whether updates to the Plan are needed (e.g., to implement lighting technology changes). Review of the Plan shall include preparation and submittal of a letter report summarizing conclusions and recommendations for the lighting plan. The letter report shall include evidence that a certified lighting professional participated in Plan review.

The project owner shall not purchase or order any permanent lighting for ~~Power Block 2~~ **the SCGT units** or new buildings (including administrative or maintenance buildings or warehouses) 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. Installation of lighting must be completed by the start of commercial operation of ~~Power Block 2~~ **the SCGT units**.

Verification: At least **90** ~~60~~ calendar days before **purchasing permanent lighting equipment for** ~~commercial operation of Power Block 2~~ **the SCGT units and other project structures**, the project owner shall submit the Plan review and letter report to the CPM for review and approval. Simultaneously with the submission of the Plan review and letter report to the CPM, the project owner shall submit seven copies to the City of Huntington Beach Planning and Building Department for review and comment. ~~The project owner shall provide any comments on the plan received from the City shall be provided to the CPM within 3 business days of receipt.~~

The project owner shall provide the CPM with a copy of the transmittal letter requesting the City's review of the Plan review and letter report**.** The City shall be allowed 30 calendar days following receipt of the stated **Pp**~~p~~lan~~t~~ to provide comments to the project owner and to the CPM. In the absence of comments within that timeframe, or a request from the City for an extension of time, the CPM may deem the letter report acceptable to the City.

Prior to the start of commercial operation of ~~Power Block 2~~ **the SCGT units**, the project owner shall notify the CPM in writing that installation of permanent lighting 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. The project owner shall obtain written confirmation from the CPM that the project complies with the Lighting Management Plan.

COMPLIANCE AND CLOSURE

COM-1 **Unrestricted Access**. The project owner shall take all steps necessary to ensure that the CPM, responsible Energy Commission staff, and ~~delegated~~ **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** ~~to facilitate~~ audits, surveys, inspections, ~~and~~ **or** general or closure-related site visits. Although the CPM ~~shall~~ **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 Application~~(s)~~ for Certification;
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 ~~or closure~~ may require the project owner to file submittals during the ~~AFC~~ **amendment** process, 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~~(s)~~ 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, whether 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
Huntington Beach Energy Project (12-AFC-2C)
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 ~~start of~~ 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 ~~**all of**~~ the following ~~**occur: the**~~**have occurred:**

1. ~~**The**~~ project owner has submitted the pre-construction matrix and all ~~**submittals required by**~~ compliance verifications pertaining to ~~**all**~~ 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 ~~staff~~ 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 ~~verification requirement~~**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 provides the CPM with the status of all conditions of certification in a spreadsheet format~~ 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., ~~sixty (~~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 (D**CBO**),** 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** ~~Reports and Key Events List.~~ The first MCR is due one (1) 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 Plan.)

During ~~project~~ pre-construction, construction, or closure~~,~~ the project owner or authorized agent shall submit an electronic searchable version of the MCR **to the CPM** within ten (10) business days after the end of each reporting month~~unless otherwise specified~~**. MCRs shall be submitted each month until construction is complete and the final certificate of occupancy is issued** by the ~~CPM~~**DCBO**. MCRs shall be clearly identified for the month being reported~~. The searchable electronic copy may be filed on an electronic storage medium or by e-mail, subject to CPM approval. The compliance verification submittal condition provides guidance on report production standards, and the~~ **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~~. **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 the conditions of certification;

7. a ~~list~~**listing** of any filings submitted to, and permits issued by, other governmental agencies during the month;

8. a projection of project compliance activities scheduled during the next **(2)** 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;

9. a ~~list~~**listing** of the month's additions to the on-site compliance file; and

10. a listing of 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 owner must submit searchable electronic ACRs ~~instead of MCRs.~~**to the CPM, as well as other periodic compliance reports (PCRs) required by the various technical disciplines.** ACRs ~~are due~~ **shall be completed** for each year of commercial operation and ~~may be required for~~ **are due each year on** a ~~specified period after~~ **date agreed to by the CPM**. **Other PCRs (e.g. quarterly reports or** decommissioning **reports** to monitor closure compliance ~~as~~**) 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:

1. an updated compliance matrix ~~showing~~**that 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;

3. 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~~**condition(s)** it satisfies~~,~~ and submitted as ~~an attachmen~~**attachments** to the ACR;

4. a cumulative ~~list~~**listing** 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 ~~list~~**listing** of filings submitted to, ~~and~~**or** permits issued by, other governmental agencies during the year;

7. a projection of project compliance activities scheduled during the next year;

8. a ~~list~~**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 ~~list~~**listing** of complaints, notices of violation, official warnings, and citations received **and a listing of incidents that occurred** during the year, a description of how the issues were resolved, and the status of any unresolved ~~matters~~**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 ~~shall~~**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.

Implementation of a project modification without first securing Energy Commission, or Energy Commission staff, approval may result in an enforcement action, including civil penalties, in accordance with section 25534 of the Public Resources Code. If the Energy Commission's rules regarding amendments are revised, the rules in effect at the time the change is requested shall apply.

The project owner is required to submit a five thousand ($5,000) dollar 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 seven hundred fifty thousand dollars ($750,000), adjusted annually. Current amendment fee information is available on the Energy Commission's website at:

http://www.energy.ca.gov/siting/filing_fees.html.

COM-11 **Reporting of Complaints, Notices, and Citations.** Prior to the start of construction or ~~decommissioning~~closure, the project owner shall send a letter to property owners within one (1) 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 ~~twenty-four (~~24~~)~~ hours per day, it ~~shall~~must include automatic answering with ~~a~~ date and time stamp recording.

The project owner shall respond to all recorded complaints within ~~twenty-four~~ 24 hours or the next business day. The project site 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 ~~who will post it on the Energy Commission's web page at: http://www.energy.ca.gov/sitingcases/huntington_beach_energy/index.html. The project owner shall~~**and promptly** report any disruption to the contact system or telephone number change to the CPM~~promptly~~, **who will provide it** to **any persons contacting him or her with a complaint.**

~~In addition to including all complaints, notices, and citations included with the MCRs and ACRs, within ten (10~~**Within five (5) business** days of receipt, the project owner shall report~~,~~ and provide copies to the CPM, of 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 subsequent 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 ~~sixty (~~60~~)~~ days prior to the start of ~~commercial operation~~**construction** (or other **CPM-approved** date),~~agreed to by the CPM),~~ 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 ~~the updating of the~~ Contingency Plan **updating** over the life of the facility. Contingency Plan elements include, but are not limited to:

1. ~~a~~**A** site-specific list and direct contact information for persons, agencies, and responders to be notified for an unanticipated event;
2. ~~a~~**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~~**A** detailed and labeled map of population centers, sensitive receptors, and the nearest emergency response facilities;
4. ~~a~~**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~~**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~~**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~~**Procedures** for maintaining contingency response capabilities; and

8. ~~the~~**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. ~~Within one hour after it is safe and feasible the~~**The** project owner shall notify the CPM ~~or Compliance Office Manager, by telephone and e-mail,~~ **within one (1) hour after it is safe and feasible, upon identification** of any incident at the facility ~~the power plant or appurtenant facilities~~ that results ~~or could result~~ in any of the following:

1. **An event of any kind that causes a "Forced Outage" as defined in the CAISO tariff**;

2. **The activation of onsite emergency fire suppression equipment to combat a fire** ~~property damage off-site~~;

3. **Any chemical, gas or hazardous materials release that could result in potential health impacts to the surrounding population or create an off-site odor issue** ~~response by off-site emergency response agencies~~;

4. ~~serious on-site injury;~~

5. ~~serious environmental damage; or~~

6. **Notification to, or response by,** ~~emergency reporting to~~ any **off-site** federal, state or local **emergency response** agency **regarding a fire, hazardous materials release, on-site injury, or any physical or cyber security incident**.

~~The notice~~ **Notification** shall describe the circumstances, status, and expected duration of the incident. If warranted, as soon as it is safe and feasible, the project owner shall implement the safe shutdown of any non-critical equipment and removal of any hazardous materials and waste that pose a threat to public health and safety and to environmental quality (also, see specific conditions of certification for the technical areas of

HAZARDOUS MATERIALS MANAGEMENT and **WASTE MANAGEMENT**).

Within ~~one (1) week~~ **six (6) business days** of the incident, the project owner shall submit to the CPM a detailed incident report, which includes, as appropriate, the following information:

1. a brief description of the incident, including its date, time, and location;
2. a description of the cause of the incident, or likely causes if it is still under investigation;
3. the location of any off-site impacts;
4. description of any resultant impacts;
5. a description of emergency response actions associated with the incident;
6. identification of responding agencies;
7. identification of emergency notifications made to federal, state, and/or local agencies;
8. identification of any hazardous materials released and an estimate of the quantity released;
9. a description of any injuries, fatalities, or property damage that occurred as a result of the incident;
10. fines or violations assessed or being processed by other agencies;
11. name, phone number, and e-mail address of the appropriate facility contact person having knowledge of the event; and
12. corrective actions to prevent a recurrence of the incident.

The project owner shall maintain all incident report records for the life of the project, including closure. After the submittal of the initial report for any incident, the project owner shall submit to the CPM copies of incident reports within ~~forty-eight (~~48~~)~~ hours of a request.

COM-14 **Non-Operation and Repair/Restoration Plans.** If the facility ceases operation ~~(excluding planned and unplanned maintenance)~~ temporarily **(excluding planned and unplanned maintenance)**, ~~either planned or unplanned,~~ for longer than one (1) week (or other CPM-approved ~~interval~~ **date**), but less than three (3) months (or other CPM-approved ~~interval~~ **date**), the project owner shall notify the CPM~~, interested agencies, and nearby property owners~~. Notice of planned non-operation shall be given at least two (2) weeks prior to the scheduled date. Notice of unplanned non-

operation shall be provided no later than one (1) 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 (1) 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.

Written **monthly** updates **(or other CPM-approved intervals)** to the CPM for non-operational periods, until operation resumes, shall include:

1. **Progress** ~~progress~~ relative to the schedule;
2. **Developments** ~~developments~~ that delayed or advanced progress or that may delay or advance future progress;
3. **Any** ~~any~~ public, agency, or media comments or complaints; and
4. **Projected** ~~projected~~ date for the assumption of operation.

During non-operation, all applicable conditions of certification and reporting requirements remain in effect. If, after one (1) 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 ~~ninety (~~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.
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 long-term 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.

A. Provisional Closure Plan ~~and Estimate of Permanent Closure Costs~~

To assure satisfactory long-term site maintenance and adequate closure for "the whole of a project," the project owner shall ~~submi~~**include within the first ACR** a Provisional Closure Plan ~~and Cost Estimate~~ for CPM review and approval.~~within sixty (60) days after the start of commercial operation.~~ The **CPM may require** Provisional Closure Plan ~~and Cost Estimate~~**updates to reflect project modifications approved by the Energy Commission. The Provisional Closure Plan** shall consider applicable final closure plan requirements, **including interim and long-term maintenance costs** and reflect ~~the use of an independent third party to~~ **that qualified personnel will** carry out ~~the~~ permanent closure **and long-term maintenance activities.**

The Provisional Closure Plan **shall reflect the most current regulatory standards, best management practices,** and ~~Cost Estimate shall~~**applicable LORS, and** provide for a phased closure process and include but not be limited to:

~~1.~~ comprehensive scope of work~~and itemized budget;~~

~~2. closure plan development costs;~~

2. dismantling and demolition;

3. recycling and site clean-up;

4. mitigation and monitoring direct, indirect, and cumulative impacts;

5. site remediation and/or restoration;

6. interim and long-term operation monitoring and maintenance, including long-term equipment replacement costs; and

7. contingencies.

~~The project owner shall include an updated Provisional Closure Plan and Cost Estimate in every fifth-year ACR for CPM review and approval. Each updated Provisional Closure Plan and Cost Estimate shall reflect the most current regulatory standards, best management practices, and applicable LORS.~~

B. Final Closure Plan and Cost Estimate

~~At least three (3) years~~**No less than one (1) year (or other CPM-approved date)** prior to initiating a permanent facility closure, the project owner shall submit for Energy Commission review and approval, a Final Closure Plan and Cost Estimate, which includes any long-term, ~~post-closure~~ 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.

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;
3. 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 revised/updated~~**a** Final Cost Estimate for all closure activities, by phases, including site monitoring and maintenance costs, and long-term equipment replacement;

6. 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 ~~delegate CBO's~~**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:

    a. proposed rehabilitation, restoration, and/or remediation procedures, as required by the conditions of certification and applicable LORS, and

    b. 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 or listserv of all responsible agencies, potentially interested parties, and property owners within one (1) 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 for **PUBLIC HEALTH**, **WASTE MANAGEMENT**, **HAZARDOUS MATERIALS MANAGEMENT**, and **WORKER SAFETY**).

If ~~implementation of~~ ~~an~~ the Energy Commission-approved Final Closure Plan and Cost Estimate **procedures** ~~is~~**are** not initiated within one (1) year of ~~the plan~~ **its** 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 (1) year, ~~the Final Closure Plan and Cost Estimate shall be resubmitted to the Commission for supplementary review and approval.~~ **the Energy Commission may initiate correction 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: _____

DOCKET #: _____

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 ~~TL~~ **Transmission Line** Construction	
Complete Transmission Line Construction	
Synchronization with Grid and Interconnection	
~~Complete T/L Construction~~	
FUEL SUPPLY LINE ACTIVITIES	
Start Gas Pipeline Construction and	
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:_____

PROJECT NAME:_____

COMPLAINANT INFORMATION

NAME:_____ PHONE NUMBER:_____

ADDRESS:_____

COMPLAINT

DATE COMPLAINT RECEIVED:_____ TIME COMPLAINT RECEIVED:_____

COMPLAINT RECEIVED BY: _____ ☐ TELEPHONE ☐ IN WRITING (COPY ATTACHED)

DATE OF FIRST OCCURRENCE:_____

DESCRIPTION OF COMPLAINT (INCLUDING DATES, FREQUENCY, AND DURATION):_____

_____

_____

FINDINGS OF INVESTIGATION BY PLANT PERSONNEL:_____

_____

_____

DOES COMPLAINT RELATE TO VIOLATION OF A CEC REQUIREMENT? ☐ YES ☐ NO

DATE COMPLAINANT CONTACTED TO DISCUSS FINDINGS:_____

DESCRIPTION OF CORRECTIVE MEASURES TAKEN OR OTHER COMPLAINT 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."

PLANT MANAGER SIGNATURE:_____ DATE: _____

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