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Single Compendium of Proposed Conditions of Certification, Final Staff Assessment and Proposed Modifications by Staff

Willow Rock Energy Storage Center

(21-AFC-02)

Lead Agency

California Energy Commission

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WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)

FACILITY DESIGN CONDITIONS OF CERTIFICATION

GEN-1 The project owner shall design, construct, and inspect the project in accordance with the 2022 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 laws, ordinances, regulations, and standards (LORS) in effect at the time initial design plans are submitted to the Delegate Chief Building Official (DCBO) for review and approval (the CBSC in effect is the edition that has been adopted by the California Building Standards Commission and published at least 180 days previously). The project owner shall ensure that all the provisions of the above applicable codes are enforced during the construction, addition, alteration, moving (onsite), demolition, repair, or maintenance of the completed facility.

In the event that the initial engineering designs are submitted to the DCBO when the successor to the 2022 CBSC is in effect, the 2022 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 (CofO), the project owner shall submit to the Compliance Project Manager (CPM) a statement of verification, signed and stamped by the responsible engineer(s), attesting that all designs, construction, installation, and inspection requirements of the applicable LORS and the California Energy Commission's (CEC's) decision have been met in the area of Facility Design. The project owner shall provide the CPM a copy of the CofO within 30 days of receipt from the DCBO.

Once the CofO 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 DCBO approval for compliance with the above codes. The CPM will then determine if the DCBO needs to approve the work.

GEN-2 Before submitting the initial engineering designs for DCBO review, the project owner shall furnish the CPM and the DCBO with a schedule of facility design submittals, and master drawings and master specifications list. The master drawings and master specifications list shall contain a list of proposed submittal packages of designs, calculations, and specifications for major structures, systems, and equipment. Major structures, systems, and equipment are structures and their associated components or equipment that are necessary for energy storage and/or 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 DCBO. To facilitate audits by the CEC staff, the project owner shall provide specific packages to the CPM upon request.

Verification: At least 60 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of rough grading, the project owner shall submit to the DCBO and to the CPM the schedule, and the master drawings and master specifications list of documents to be submitted to the DCBO, for review and approval. These documents shall be the pertinent design documents for the major structures, systems, and equipment defined above in COC **GEN-2**. Major structures, systems, 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 (MCR).

GEN-3 The project owner shall make payments to the DCBO for design review, plan checks, construction inspections, and other applicable DCBO activities, based upon a reasonable fee schedule to be negotiated between the project owner and the DCBO. If the CEC delegates the DCBO function to a third party or local agency, the project owner, at the CEC's direction, shall make payments directly to the DCBO based upon a fee schedule negotiated between the CEC and the DCBO. These fees may be consistent with the fees listed in the 2022 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 DCBO.

Verification: The project owner shall send a copy of the DCBO's receipt of payment to the CPM in the next MCR 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.

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 DCBO design review and inspection to ensure compliance with LORS;

2. Ensure that construction of all facilities subject to DCBO design review and inspection conforms in every material respect to applicable LORS, these COCs, 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 DCBO 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 DCBO of corrective action or the disposition of items noted on laboratory reports or other tests when they do not conform to approved plans and specifications.

The RE (or their delegate) must be located at the project site or be available at the project site within a reasonable 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 DCBO for review and approval. The project owner shall notify the CPM of the DCBO's approval of the new engineer.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of rough grading, the project owner shall

submit to the DCBO 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 DCBO'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 shall within five days submit the name, qualifications, and registration number of the newly assigned engineer to the DCBO for review and approval. The project owner shall notify the CPM of the DCBO'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 project structures and equipment supports; a mechanical engineer; and an electrical engineer. (California Business and Professions Code sections 6704, 6730, 6731, and 6736 require state registration to practice as a civil engineer or structural engineer in California).

The tasks performed by the civil, mechanical, electrical, or design engineers may be divided between two or more engineers, as long as each engineer is responsible for a particular segment of the project (for example, proposed earthwork, civil structures, project 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 DCBO 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 DCBO for review and approval. The project owner shall notify the CPM of the DCBO's approval of the new engineer.

1. The civil engineer shall:
    a. 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;

b. 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 DCBO. These include, but may not be limited to 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

c. 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.

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

    a. Review all the engineering geology reports;

    b. 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;

    c. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with requirements set forth in the 2022 CBC (depending on the site conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both); and

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

3. 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.

4. The engineering geologist shall:

    a. Review all the engineering geology reports and prepare a final soils grading report; and

    b. Be present, as required, during site grading and earthwork to provide consultation and monitor compliance with the requirements set forth in the 2022 CBC (depending on the site

conditions, this may be the responsibility of either the soils engineer, the engineering geologist, or both).

5. The design engineer shall:
    a. Be directly responsible for the design of the proposed structures and equipment supports;
    b. Provide consultation to the RE during design and construction of the project;
    c. Monitor construction progress to ensure compliance with engineering LORS;
    d. Evaluate and recommend necessary changes in design; and
    e. Prepare and sign all major building plans, specifications, and calculations.
6. The mechanical engineer shall be responsible for, and sign and stamp a statement with, each mechanical submittal to the DCBO, stating that the proposed final design plans, specifications, and calculations conform to all of the mechanical engineering design requirements set forth in the CEC's decision.
7. The electrical engineer shall:
    a. Be responsible for the electrical design of the project; and
    b. Sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of rough grading, the project owner shall submit to the DCBO 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 a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of construction, the project owner shall submit to the DCBO 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 DCBO's approvals of the responsible engineers within five days of the approval.

If any one of the designated responsible engineers is subsequently reassigned or replaced, the project owner shall within five days submit the name, qualifications, and registration number of the newly assigned engineer to the DCBO for review and

approval. The project owner shall notify the CPM of the DCBO'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 2022 CBC.

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

1. Be a qualified person who shall demonstrate competence, to the satisfaction of the DCBO, 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 DCBO and RE. All discrepancies shall be brought to the immediate attention of the RE for correction, then, if uncorrected, to the DCBO and the CPM for corrective action; and
4. Submit a final signed report to the RE, DCBO, 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 a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of an activity requiring special inspection, the project owner shall submit to the DCBO 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 DCBO's approval of the qualifications of all special inspectors in the next MCR.

If the special inspector is subsequently reassigned or replaced, the project owner shall within five days submit the name and qualifications of the newly assigned special inspector to the DCBO for approval. The project owner shall notify the CPM of the DCBO'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 DCBO design review and approval, the

project owner shall document the discrepancy and recommend required corrective actions. The discrepancy documentation shall be submitted to the DCBO for review and approval. The discrepancy documentation shall reference this condition of certification and, if appropriate, applicable sections of the CBC and/or other LORS.

Verification: The project owner shall transmit a copy of the DCBO's approval of any corrective action taken to resolve a discrepancy to the CPM in the next MCR. 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 DCBO's approval.

GEN-8 The project owner shall obtain the DCBO's final approval of all completed work that has undergone DCBO design review and approval. The project owner shall request the DCBO to inspect the completed structure and review the submitted documents. The project owner shall notify the CPM after obtaining the DCBO's final approval. The project owner shall retain one set of approved engineering plans, specifications, and calculations (including all approved changes) at the project site, or at another accessible location, during the operating life of the project. Electronic copies of the approved plans, specifications, calculations, and marked-up as-built shall be provided to the DCBO for retention by the CPM.

Verification: Within 15 days of the completion of any work, the project owner shall submit to the DCBO, with a copy to the CPM in the next MCR, (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 DCBO 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" files (the latest version of Adobe .pdf available), with restricted (password-protected) printing privileges.

CIVIL-1 The project owner shall submit to the DCBO 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 2022 CBC.

Verification: At least 15 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of site grading the project owner shall submit the documents described above to the DCBO for design review and approval. In the next MCR following the DCBO's approval, the project owner shall submit a written statement certifying that the documents have been approved by the DCBO.

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 DCBO based on these new conditions. The project owner shall obtain approval from the DCBO 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 DCBO's approval to resume earthwork and construction in the affected areas, the project owner shall provide to the CPM a copy of the DCBO's approval.

CIVIL-3 The project owner shall perform inspections in accordance with the 2022 CBC. All site-grading operations, for which a grading permit is required, shall be subject to inspection by the DCBO.

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 DCBO, and the CPM. The project owner shall prepare a written report, with copies to the DCBO 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 DCBO 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 DCBO and the CPM. A list of NCRs for the reporting month shall also be included in the following MCR.

CIVIL-4 After completion of finished grading and erosion and sedimentation control and drainage work, the project owner shall obtain the DCBO'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 their area of responsibility was done in accordance with the final approved plans.

Verification: Within 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) of the completion of the erosion and sediment control mitigation and drainage work, the project owner shall submit to the DCBO, 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 DCBO's approval to the CPM in the next MCR.

STRUC-1 Prior to the start of any increment of construction, the project owner shall submit plans, calculations, and other supporting documentation to the DCBO for design review and acceptance for all project structures, systems, and equipment identified in the DCBO-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 DCBO has approved the lateral force procedures to be employed in designing that structure or component. The project owner shall:

1. Obtain approval from the DCBO of lateral force procedures proposed for project structures;
2. Obtain approval from the DCBO 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 DCBO 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 DCBO the responsible design engineer's signed statement that the final design plans conform to applicable LORS.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of any increment of construction of any structure or component listed in the DCBO-approved master drawing and master specifications list, the project owner shall submit to the DCBO 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 MCR, a copy of a statement from the DCBO 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 DCBO the required number of sets of the following documents related to work that has undergone DCBO design review and approval:

1. Concrete cylinder strength test reports (including date of testing, date sample taken, design concrete strength, tested cylinder strength, age of test, type and size of sample, location and quantity of concrete placement from which sample was taken, and mix design designation and parameters);
2. Concrete pour sign-off sheets;
3. Bolt torque inspection reports (including location of test, date, bolt size, and recorded torques);
4. Field weld inspection reports (including type of weld, location of weld, inspection of non-destructive testing (NDT) procedure and results, welder qualifications, certifications, qualified procedure description or number (ref: AWS); and
5. Reports covering other structural activities requiring special inspections shall be in accordance with the 2022 CBC.

Verification: If a discrepancy is discovered in any of the above documents, 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 DCBO, 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 DCBO and the CPM.

The project owner shall transmit a copy of the DCBO's approval or disapproval of the corrective action to the CPM within 15 days. If disapproved, the project owner shall advise the CPM, within five days, of the reason for disapproval, and the revised corrective action to obtain DCBO's approval.

STRUC-3 The project owner shall submit to the DCBO design changes to the final plans required by the 2022 CBC, including the revised drawings, specifications, calculations, and a complete description of, and supporting rationale for, the proposed changes, and shall give to the DCBO prior notice of the intended filing.

Verification: On a schedule suitable to the DCBO, the project owner shall notify the DCBO 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 DCBO, with a copy of the transmittal letter to the CPM. The project owner shall notify the CPM, via the MCR, when the DCBO has approved the revised plans.

STRUC-4 Tanks and vessels (if any) containing quantities of toxic or hazardous materials exceeding amounts specified in the 2022 CBC shall, at a minimum, be designed to comply with the requirements of that chapter.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative 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 DCBO 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 DCBO approvals of plan checks to the CPM in the MCR following receipt of such approvals. The project owner shall also transmit a copy of the DCBO's inspection approvals to the CPM in the MCR following completion of any inspection.

MECH-1 The project owner shall submit, for DCBO design review and approval, the proposed final design, specifications, and calculations for the project's mechanical-related components listed in the DCBO-approved master drawing and master specifications list. The submittal shall also include the applicable Quality Assurance/Quality Control procedures. Upon completion of construction of any such component, the project owner shall request the DCBO's inspection approval of that construction.
The responsible mechanical engineer shall stamp and sign all plans, drawings, and calculations for the major project's mechanical-related components, subject to DCBO design review and approval, and submit a signed statement to the DCBO when the proposed components have been designed, fabricated, and installed in accordance with all of the applicable LORS, which may include, but are not limited to:

- ASME Boiler and Pressure Vessel Code and Interpretation: Section V, Article 7: Nondestructive Examination; Section VIII, Division 1, Part UG-28: Rules for Construction of Unfired Pressure Vessels; and

- Title 24, California Code of Regulations, Part 2 (California Building Code).

The DCBO may deputize inspectors to carry out the functions of the CEC's code enforcement mandate.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of any increment of major mechanical-related components' construction listed in the DCBO-approved master drawing and master specifications list, the project owner shall submit to the DCBO 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 MCR.

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

MECH-2 The project owner shall submit to the DCBO 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 DCBO'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 DCBO that the proposed final design plans, specifications and calculations conform with the applicable LORS.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of construction of any HVAC or refrigeration system, the project owner shall submit to the DCBO 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 (V) or higher (see a representative list, below) the project owner shall submit, for DCBO 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 DCBO inspect the installation to ensure compliance with the requirements of applicable LORS.

A. Final design plans shall include:
    1. one-line diagram for the 13.8 kilovolts (kV), 4.16 kV and 480 V systems;
    2. system grounding drawings;
    3. lightning protection system; and
    4. hazard area classification plan.

B. Final calculations must establish:
    1. short-circuit ratings of facility 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 110/480 V systems;
    6. system grounding requirements;
    7. lighting energy calculations; and
    8. 110-Volt system design calculations and submittals showing feeder sizing, transformer and panel load confirmation, fixture schedules and layout plans.

C. The following activities shall be reported to the CPM in the MCR:
    1. Receipt or delay of major electrical equipment;
    2. Testing or energizing of major electrical equipment; and
    3. A signed statement by the registered electrical engineer certifying that the proposed final design plans and specifications conform to requirements set forth in the CEC decision.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of each increment of electrical construction, the project owner shall submit to the DCBO 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 MCR.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
TRANSMISSION SAFETY ENGINEERING CONDITIONS OF CERTIFICATION

TSE-1 The project owner shall furnish to the Compliance Project Manager (CPM) and to the Delegate Chief Building Official (DCBO) 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 CEC staff, the project owner shall provide designated packages to the CPM when requested.

Verification: Prior to the start of construction of the transmission lines, gen-tie lines, or related structures and facilities, the project owner shall submit the schedule, a Master Drawing List, and a Master Specifications List to the DCBO 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 a list of major equipment in **Table 1**: Major Equipment List below). Additions and deletions shall be made to the table only with CPM and DCBO 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 Before the start of construction, the project owner shall assign to the project an electrical engineer and at least one of each of the following:

a. a civil engineer;

b. a geotechnical engineer or a civil engineer experienced and knowledgeable in the practice of soils engineering;

c. a design engineer who is either a structural engineer or a civil engineer and fully competent and proficient in the design of power plant structures and equipment supports; or

d. a mechanical engineer (Business and Professions Code Sections 6704 et seq. require state registration to practice as either a civil engineer or a structural engineer in California).

The tasks performed by the civil, geotechnical, mechanical, electrical, or design engineers may be divided between two or more engineers as long as each engineer is responsible for a particular segment of the project, e.g., proposed earthwork, civil structures, power plant structures, or 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 civil, geotechnical, or civil and design engineer, assigned as required by Facility Design COC **GEN-5**, may be responsible for design and review of the TSE facilities.

The project owner shall submit to the DCBO, for review and approval, the names, qualifications, and registration numbers of all engineers assigned to the project. If any one of the designated engineers is subsequently reassigned or replaced, the project owner shall submit the name, qualifications, and registration number of the newly assigned engineer to the DCBO for review and approval. The project owner shall notify the CPM of the DCBO's approval of the new engineer. This engineer shall be authorized to halt earth work and require changes; if site conditions are unsafe or do not conform with the predicted conditions used as the basis for design of earth work or foundations.

The electrical engineer shall:

1. be responsible for the electrical design of the power plant switchyard, outlet, and termination facilities; and

2. sign and stamp electrical design drawings, plans, specifications, and calculations.

Verification: Prior to the start of rough grading, the project owner shall submit to the DCBO for review and approval, the names, qualifications, and registration numbers of all the responsible engineers assigned to the project. The project owner shall notify the CPM of the DCBO's approvals of the engineers within five days of the approval.
If the designated responsible engineer is subsequently reassigned or replaced, the project owner has five days in which to submit the name, qualifications, and registration number of the newly assigned engineer to the DCBO for review and approval. The

project owner shall notify the CPM of the DCBO's approval of the new engineer within five days of the approval.

TSE-3 If any discrepancy in design and/or construction is discovered in any engineering work that has undergone DCBO design review and approval, the project owner shall document the discrepancy and recommend corrective action. The discrepancy documentation shall become a controlled document and shall be submitted to the DCBO for review and approval and refer to this condition of certification.

Verification: The project owner shall submit a copy of the DCBO's approval or disapproval of any corrective action taken to resolve a discrepancy to the CPM within 15 days of receipt. If disapproved, the project owner shall advise the CPM, within five days, the reason for the disapproval, along with the revised corrective action required to obtain the DCBO's approval.

TSE-4 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 DCBO. 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 DCBO 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 (Table 1 of **TSE-1**);
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 DCBO for review and approval the final design plans, specifications and calculations for equipment and systems of the power plant switchyard, and 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-5 The project owner shall ensure that the design, construction, and operation of the proposed transmission lines, generator tie-lines, or related structures and 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 DCBO. Once approved, the project owner shall inform the CPM and DCBO 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 DCBO 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 of Regulations (Title 8); Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, 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:

g. The Special Protection System sequencing and timing if applicable,

h. 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, if applicable,

i. Any updates to the executed LGIA signed by the SCE and the project owner.

j. Approval from LADWP indicating that the WRESC gen-tie line underground section can be built in the LADWP transmission corridor.

Verification: Prior to the start of construction or start of modification of transmission lines, gen-tie lines, or related structures and facilities, the project owner shall submit to the DCBO 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 of Regulations (Title 8); Articles 35, 36 and 37 of the *High Voltage Electric Safety Orders*, 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 DCBO 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 of Regulations (Title 8); Articles 35, 36 and 37 of the *High Voltage Electric Safety Orders*, California ISO standards, National Electric Code (NEC), and related industry standards.
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 COC **TSE-5** a) through f).
d. Generator Special Facilities Agreement shall be provided concurrently to the CPM and DCBO. Substitution of equipment and substation configurations shall be identified and justified by the project owner for DCBO and CPM approval.
e. Any changes or updates to the executed LGIA signed by the SCE and the project owner.
f. Prior to the start of construction of any project modification requiring approval of the SCE, provide the interconnection approval to the CPM. Interconnectional approval for modification of existing facilities can be in the form of an approved Material Modification or approval of the proposed changes to project and the existing interconnection facilities. Within 15 days after cessation of construction the project owner shall provide a statement to the CPM from the registered engineer in responsible charge (signed and sealed) that the switchyard and transmission facilities conform to the above listed requirements.
g. A signed letter from LADWP indicated that the construction of the underground WRESC gen-tie line in the LADWP transmission corridor is acceptable.

TSE-6 The project owner shall be responsible for the inspection of the transmission lines, generator tie-lines, or related structures and facilities during and after project construction, and any subsequent CPM and DCBO 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 DCBO in writing, within 10 days of discovering such non-conformance and describe the corrective actions to be taken.

Verification: Within 90 days after first synchronization of the project, the project owner shall transmit to the CPM and DCBO:

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 lines, generator tie-lines, or related structures and 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".

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
WORKER SAFETY AND FIRE PROTECTION CONDITIONS OF CERTIFICATION

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

- a Construction Personal Protective Equipment Program;
- a Construction Exposure Monitoring Program which shall include a Sampling and Analysis Plan for monitoring wastewater from the cavern initial access construction if Method 1 is chosen, and a Sampling and Analysis Plan for routine sampling of excavated dust, soil, and rock removed from the cavern for the determination of hazardous wastes;
- a Construction Injury and Illness Prevention Program;
- a Rock Crusher Safety Program that includes a dust and particulate emissions controls;
- a Concrete Batch Plan Safety Program;
- a Construction Emergency Action Plan;
- an Emergency Response Plan;
- a Hazardous Material Business Plan (HMBP);
- a Spill Prevention, Control and Countermeasure Plan (SPCC);
- a Mining Safety and Health Plan that demonstrates compliance with all applicable MSHA regulations for the construction of the underground cavern; and
- a Construction Fire Prevention Plan that includes thoroughly detailed Fire Detection and Suppression Plans for both surface and underground construction activities, Emergency Rescue Plans for both surface and underground construction, and methods of access for emergency responders through locked gates at the surface and into the underground cavern.

The Personal Protective Equipment Program, the Exposure Monitoring Program, the Injury and Illness Prevention Program, the Rock Crusher Safety Protocol, the Concrete Batch Plant Safety Protocol, and the SPCC 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, Construction Emergency Response Plan, the Controlled Detonations Plan, the HMBP, and the Fire Prevention Plan shall be submitted to the KCFD for review and comment prior to submittal to the CPM for approval. The Controlled Detonations Plan shall

also be submitted to the Kern County Sheriff's Office for review and comment.

Verification: At least 90 days prior to the start of construction, the project owner shall submit to the CPM for review and approval a copy of the Project Construction and Safety and Health Program. At the same time, the project owner shall also provide to the CPM a copy of letters requesting comments submitted to KCFD and KCSO. Written responses from the KCFD and KCSO, if any, detailing resolved comments shall be submitted to the CPM within 30 days of receipt by the Project Owner.

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

- an Operation Injury and Illness Prevention Plan;
- an Operations Emergency Action Plan that that fulfills the requirements of California Public Utilities Code 761.3 section (g);
- An Operations Emergency Response Plan;
- a Hazardous Materials Business Plan;
- a Spill Prevention, Control and Countermeasure Plan (SPCC);
- a Fire Prevention Plan (Cal Code Regs., tit. 8, § 3221) that includes methods of access for emergency responders through locked gates;
- a Fire Protection System Impairment Program; and
- a Personal Protective Equipment Program (Cal Code Regs., tit.8, §§ 3401—3411).

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

Verification: At least 30 days prior to the start of commissioning, the project owner shall submit to the CPM for review and approval the Operations and Maintenance Safety and Health Program. The project owner shall provide a copy to the CPM of letters requesting comments submitted to KCFD and written responses, if any from the KCFD detailing the resolved comments on the Operations Fire Prevention Plan, Fire Protection System Impairment Program, and Emergency Action Plan.

WORKER SAFETY-3 The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of compressed air energy projects, worker safety issues concerning underground mining, and relevant worker safety-related LORS. The CSS shall be capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to ensure compliance and mitigate hazards. The CSS shall:

- have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;
- ensure that the safety program for the project complies with Cal OSHA and federal regulations related to A-CAES projects;
- ensure that all construction and commissioning workers and supervisors receive adequate safety training;
- conduct accident and safety-related incident investigations and provide emergency response reports for injuries, and inform the CPM of safety-related incidents; and,
- ensure that all the plans identified in COC **WORKER SAFETY-1** and **-2** are implemented.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the CSS. The contact information of any replacement CSS shall be submitted to the CPM within one business day.

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

- a record of all employees trained for that month (all records shall be kept on site for the duration of the project);
- summary report of safety management actions and safety-related incidents that occurred during the month;
- report of any continuing or unresolved situations and incidents that may pose danger to life or health;
- report of any visits from Cal OSHA and/or any complaints from workers to Cal OSHA; and,
- report of accidents, injuries, and near misses that occurred during the month.

WORKER SAFETY-4 The project owner shall make payments to the DCBO for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the DCBO. Those services shall be in addition to other work performed by the DCBO. The Safety Monitor shall be selected from an independent company not affiliated with the DCBO and report directly to the DCBO and would be responsible for verifying that the CSS, as

required in COC **WORKER SAFETY-3**, implements all appropriate Cal OSHA and CEC safety requirements. The Safety Monitor shall 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 The project owner shall submit to the CPM a copy of the Project Construction Controlled Detonation Plan that contains a complete description of how explosives would be safely transported and used at the site, evacuation, security and fire prevention procedures, a blasting equipment list, and procedures for notification of nearby receptors. The Controlled Detonations Plan shall be prepared by a qualified, experienced, and licensed blasting contractor and in compliance with appropriate federal and state regulations addressing explosives and worker safety regulations, including: the Hazards Material Transportation Act (49 U.S.C. 5101 et seq. and 49 CFR Part 171-177); the Organized Crime Control Act of 1970, Title XI (Public Law 91-452); BATF regulations (27 CFR Part 555), the California Fire Code Chapter 56 – sections 5603, 5604, and 5607, and Cal/OSHA regulations Cal Code Regs., tit. 8, § § 1550- 1580 and 5236 -5252). The controlled detonations notification procedures included in the Controlled Detonations Plan shall include, but not be limited to:

- At least 30 days before initiation of controlled detonations, the project owner shall notify, in writing, all residents or owners of dwellings or other structures within a **1**~~5~~-mile radius (or other distance as recommended by either the KCFD Chief or the Kern County Sheriff's Office (KCSO) of proposed controlled detonations and describing how to request and submit a pre-controlled detonations survey. Notification shall include posting a written notice within the project site, in local newspapers, and on the Kern County public website describing proposed controlled detonations activities and how to obtain and submit a pre-controlled detonations survey.
- The project owner shall determine the condition of the dwelling or structure and shall document any pre-controlled detonations damage and other physical factors that could more likely than not be affected by the controlled detonations. Structures such as pipelines, cables, transmission lines, and cisterns, wells, and other water systems warrant special attention; however, the

assessment of these structures may be limited to surface conditions and other readily available data.

- Prior to finalizing the Controlled Detonation Plan, the project owner shall consult with jurisdictional authorities tasked with protecting waters of the state and implement avoidance and minimization measures, as required by California Department of Fish and Wildlife (CDFW), United States Army Core of Engineers (USACE), and regional water quality (Section 401) regulatory permits prepared for the project. Such protective measures shall be included in the Controlled Detonations plan and/or incorporated by reference.
- The explosives and blasting safety procedures to be included in the Blasting Controlled Detonation Plan shall include, but not be limited to the following:

a. using qualified, experienced, and licensed blasting contractors that shall perform controlled detonations using current and professionally accepted methods, products, and procedures to maximize safety and minimize the potential for wildfire ignition during controlled detonations operations;
b. both the quantity and duration of on-site explosives storage shall be minimized;
c. explosive products shall be managed on-site so that they are either used in the borehole, returned to the delivery vehicle, or placed in secure containers for off-site disposal;
d. explosives shall be stored in an approved structure (magazine);
e. explosives storage facilities shall be bullet-resistant, weather-resistant, and fire resistant;
f. magazines sites shall be in remote (out-of-sight) areas with restricted access, kept cool, dry, and well ventilated, and will be properly labeled and signed;
g. controlled detonations are prohibited during extreme fire danger periods;
h. fire suppression personnel shall be posted at controlled detonation sites at all times;
i. refueling of vehicles carrying explosives shall not be allowed on the project site;
j. smoking shall be prohibited during the loading, transporting, unloading, and use of explosives;
k. vehicles carrying explosives shall not be parked or left unattended except in designated parking areas with approval of the KCFD Chief or State Fire Marshal;

l. ignition devices shall be prohibited within 50 feet of an explosives' storage area;
m. magazine sites shall be well ventilated and maintained so that they are clear of fuels and combustible materials;
n. magazines shall be protected from wildfires that could occur in the immediate area;
o. detonators shall be stored separately from other explosive materials;
p. the most stringent spacing between individual magazines will be determined according to the guidelines contained in the BATF publication or state or local explosive storage regulations;
q. all active controlled detonation zones shall have clear warning signs at key access points to ensure the public does not accidentally enter a controlled detonation zone;
r. the blasting contractor shall use a signaling system to alert all onsite workers of an impending blast;
s. following detonation, the blasting area shall be inspected for undetonated or misfired explosives;
t. appropriate practices shall be developed and implemented to prevent misfires;
u. the controlled detonation areas shall also be inspected for hazards such as falling rock and rockslides;
v. special attention shall be given to preventing potential hazards in the controlled detonation areas resulting from flying rock, destabilized walls, structures, presence of low flying aircraft, and dispersion of smoke and gases;
w. loaded explosives shall be detonated as soon as possible and shall not be left in the blast holes overnight, unless weather or other documented safety concerns reasonably dictate that detonation should be postponed; and
x. explosives shall be loaded to maintain good continuity in the column load to promote complete detonation. Industry accepted loading practices for priming, stemming, decking and column rise shall be attended to.

The Construction Controlled Detonations Plan shall be submitted to the KCFD and the Kern County Sheriff's Office (KCSO) for review and comment prior to submittal to the CPM for approval.

Verification: At least 90 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 Controlled Detonations Plan. At the same time, the project owner shall also provide to the CPM a copy of letters from the KCFD and the KCSO the Controlled Detonations Plan containing their comments on the Controlled Detonations Plan.

WORKER SAFETY-6 The project owner shall prepare and submit a Sampling and Analysis Plan (SAP) to conduct laboratory periodic testing of the water from the AVEK Water Agency to be used for dust control and surface soils from the dirt roads on the site, have a state certified laboratory conduct the analysis of hexavalent chromium, or provide copies of an equivalent analysis if available from AVEK, and submit both the SAP and lab results to the CPM for review and approval prior to the use or ground application of water from those wells.

Verification: At least 60 days prior to the starting of construction, the project owner shall submit the SAP to the CPM for review and approval. At least 30 days prior to the planned use of the AVEK supplied water, the project owner shall submit the laboratory findings to the CPM for review and approval of the use of the AVEK water for dust control and human consumption, and the surface soil tests shall be used to determine a baseline level of hexavalent chromium. At least every six months, sampling and analysis shall be repeated and the results submitted to the CPM for review.

WORKER SAFETY-7 The project owner shall develop and implement a worker Valley Fever Prevention and Response Plan that includes an enhanced Dust Control Plan containing the requirements described in **AQ-SC3** and additionally requires:

1. The mandatory on-site use of earth moving and excavating equipment with environmental cabs (with AC and HEPA filters) and keeping the doors of the cab closed;
2. Mandatory site worker use of dust masks (NIOSH N-95 or better) in areas where active trenching occurs, even if dust is not visually detected;
3. Implementation of enhanced dust control methods (increased frequency of watering to no less than three (3) times each day at locations where active trenching is conducted), use of dust suppression chemicals, etc. consistent with **AQ-SC3**) immediately whenever visible dust comes from or onto the site;
4. Specific training on Valley Fever as per Labor Code Section 6109 which requires that employers of workers in high-incidence counties (Kern County is included) shall provide effective awareness training on Valley Fever to all employees before work begins and annually by that date thereafter;
5. Medical referral protocol; and
6. Reporting of medically-diagnosed cases to the California Department of Public Health, Cal OSHA, and the CPM.

Verification: At least 60 days prior to the commencement of site mobilization,

the Valley Fever Prevention and Response Plan shall be provided to the CPM for review and approval.

WORKER SAFETY-8 The project owner shall prepare and implement a detailed comprehensive Construction Underground Fire Protection Plan which shall include the following sections:

1. Pre-planning and hazard identification
2. Ventilation control
3. Combustible material management
4. Fire detection and alarm systems
5. Fire suppression systems
6. Emergency Response Plan that includes evacuation procedures and refuge chambers
7. Compliance with regulations from Cal OSHA, MSHA, and NFPA 122.
8. Worker and Management Training
9. Regular inspections and maintenance

Verification: At least 90 days prior to the start of ~~site~~ mobilization **of underground cavern construction activities**, the project owner shall provide to the KCFD a copy of the plan for review and comment and to the CPM for review and approval.

WORKER SAFETY-9 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, and NFPA 122: Standard for Fire Prevention and Control in Metal/Nonmetal Mining and Metal Mineral Processing Facilities, as the minimum level of fire protection. The project owner shall interpret and adhere to all applicable NFPA 850 and NFPA 122 recommended provisions and actions stating "should" as "shall." In any situations where both NFPA 850, NFPA 122, 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 and NFPA 122. At least 90 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 KCFD for review and comment, to the CPM for review and approval, and to the DCBO for plan check approval and construction inspection.

WORKER SAFETY-10 The project owner shall ensure that a portable AED is on site during construction, commissioning, and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functional. 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 CSS or delegate, and all shift foremen. During operations, all project employees on site shall be trained in its use. The training program shall be submitted to the CPM for review and approval.

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

WORKER SAFETY-11 The project owner shall do the following at the project site:

1. Provide at least two gates into the facility wide enough for emergency access with both equipped with Knox Boxes for access by the KCFD, the CHP, and KCSO;
2. Install remote fire or heat sensors at sufficient locations to cover the entire facility (e.g., thermal infrared);
3. Provide fire water flow of at least 1,500 gallons per minute;
4. Install CCTV cameras with Pan, Tilt, Zoom (PTZ), and low-light capability that cover the entire area of the facility and which would have their own separate power supply;
5. Establish a Command and Control protocol for staff to perform emergency duties and responsibilities during the detection, initiation, and escalation of an on-site ground level or underground level fire or rescue operation;
6. Ensure that three certified professionals, one to conduct underground gas testing, one to serve as a safety inspector, and one Certified Industrial Hygienist (CIH) to conduct air sampling and analysis, are present onsite every day and visit the cavern at intervals as dictated by a plan reviewed and approved by the CPM;
7. Establish an annual joint training program with the KCFD that includes table-top exercises for fire and rescue operations;
8. Consult with the KCFD in preparing subsurface fire protection and rescue procedures; and
9. Hold a pre-construction and excavation conference with the CPM, Cal OSHA Mining and Tunneling Unit, the DCBO, and the DCBO Safety Monitor to review all safety plans for the cavern excavation and revise those plans as necessary.

Verification: At least 60 days prior to the starting of construction, the project owner shall provide all the information required above to the KCFD for review and comment, to the CPM for review and approval, and to the DCBO for plan check approval and construction inspection. The project owner shall also schedule, after consultation and

agreement of all parties involved, the pre-cavern construction and excavation conference at least 60 days prior to the starting of cavern excavation and shall give the CPM at least 30 days written notice of the meeting. The project owner shall also provide a letter that the KCFD, CHP, and KCSO have been given access to the Knox boxes.

WORKER SAFETY-12 The project owner shall either:

a. Reach an agreement with the KCFD regarding funding to provide mitigation for direct and cumulative project-related impacts, or

b. If no agreement can be reached, provide funding for a fully equipped Urban Search and Rescue (USAR) Unit and building, including necessary equipment for use in Eastern Kern County, and staffing costs during the construction phase and agreements to pay for emergency response if the USAR is not delivered before construction begins, which shall consist of a lump sum of $1,900,000 for the USAR, plus a lump sum payment in the amount of $2,400,000 for the first year of staffing and made annually until the final Certificate of Occupancy for operations is issued by Kern County or as authorized by the CEC, or if construction begins and the new USAR Unit has not been delivered, then the applicant shall sign an agreement with the KCFD to reimburse costs for responding to incidents at the WRESC site. Such an agreement will terminate once the USAR Unit is delivered, and the staffing annual payment is made.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall provide to the CPM for review and approval either:

a. A copy of the agreement with the KCFD, or
b. Documentation that a letter of credit has been provided to the KCFD in the amounts listed above and that a letter of credit will be provided each year (plus yearly negotiated increases), in the amounts listed above, or an agreement to reimburse the KCFD for the costs for responding to incidents at the WRESC until the USAR Unit is completed and occupied.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
AIR QUALITY CONDITIONS OF CERTIFICATION

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

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates.

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

Verification: At least 30 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 15 days from the date of receipt.

AQ-SC3 Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each Monthly Compliance Report that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation measures for the purposes of minimizing fugitive dust emission creation from construction activities and preventing all fugitive dust plumes that would not comply with the performance standards identified in **AQ-SC4** from leaving the project site. Any deviation from the AQCMP mitigation measures shall require prior CPM notification and approval.

Construction Fugitive Dust Control: The AQCMM shall submit documentation to the CPM in each Monthly Compliance Report that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation measures for the purposes of minimizing fugitive dust emission creation from construction activities and preventing all fugitive dust plumes that would not comply with the performance standards identified in **AQ-SC4**

from leaving the project site. Any deviation from the AQCMP mitigation measures shall require prior CPM notification and approval.

Report monthly on the following fugitive dust mitigation measures that shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by **AQ-SC2**:

1. All soil being actively excavated or graded and all crushed rocks shall be sufficiently watered or stabilized to prevent excessive dust. Watering or the application of soil stabilizers shall occur as needed with complete coverage of disturbed soils areas. Watering shall take place a minimum of three times daily where soil is being actively disturbed, unless dust is otherwise controlled by rainfall or use of soil stabilizers.
2. Vehicle speed for all on site (i.e., within the project boundary) construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. Signs identifying construction vehicle speed limits shall be posted along onsite roadways, at the site entrance/exit, and along unpaved site access roads.
3. Vehicle speeds on all offsite unpaved project-site access roads (i.e., outside the project boundary) construction vehicles shall not exceed 25 mph. Signs identifying vehicle speed limits shall be posted along unpaved site access roads and at the site entrance/exit.
4. All onsite unpaved roads and offsite unpaved public project-site access road(s) shall be effectively stabilized of dust emissions using water or EKAPCD-approved dust suppressants/palliatives, sufficient to minimize visible wind-blown dust at nearby residences or public roads. During the dry season, unpaved road surfaces and vehicle parking/staging areas shall be watered or otherwise stabilized immediately prior to periods of high use (e.g., worker commute periods, truck convoys). Reclaimed (non-potable) water shall be used to the extent available and feasible.
5. The amount of the disturbed area (e.g., grading, excavation, cavern) shall be reduced and/or phased where possible.
6. All disturbed areas shall be sufficiently watered or stabilized by EKAPCD-approved methods to prevent excessive dust. Watering frequency or the use of soil stabilizers shall be increased whenever wind speeds exceed 15 mph or, as necessary, to minimize visible wind-blown dust at nearby residences or public roads. If water is used in place or to supplement soil stabilizers, then reclaimed

(non-potable) water shall be used to the extent available and feasible.

7. All disturbed areas anticipated to be inactive for periods of 30 days or more shall be treated to minimize wind-blown dust emissions. Treatment may include, but is not limited to, the application of an EKAPCD-approved chemical dust suppressant, gravel, hydro-mulch, revegetation/seeding, or wood chips.
8. All active and inactive disturbed surface areas shall be stabilized, where feasible.
9. Equipment and vehicle access to disturbed areas shall be limited to only those vehicles necessary to complete the construction activities.
10. Where applicable, permanent dust control measures shall be implemented as soon as possible following completion of any soil-disturbing activities.
11. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate methods sufficient to reduce visible dust plumes. If necessary and where feasible, three-sided barriers shall be constructed around storage piles and/or piles shall be covered by use of tarps, hydro-mulch, woodchips, or other materials sufficient to minimize wind-blown dust.
12. All trucks hauling dirt, sand, soil, excavated materials or other loose materials shall be covered or shall maintain at least six inches of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with California Vehicle Code Section 23114.
13. Gravel pads, grizzly strips, or other material track-out control methods approved for use by EKAPCD shall be installed where vehicles enter or exit unpaved roads onto paved roadways.
14. Haul trucks and off-road equipment leaving the site shall be washed with water or high-pressure air, and/or rocks/grates at the project entry points shall be used, when necessary, to remove soil deposits and minimize the track-out/deposition of soil onto nearby paved roadways.
15. During construction paved road surfaces adjacent to the site access road(s), including adjoining paved aprons, shall be cleaned, as necessary, to remove visible accumulations of track-out material. If dry sweepers are used, the area shall be sprayed with water prior to sweeping to minimize the entrainment of dust. Reclaimed water shall be used to the extent available.

16. Portable equipment, 50 horsepower or greater, used during construction activities (e.g., portable generators) shall require California statewide portable equipment registration (issued by CARB) or an EKAPCD permit.
17. Signs shall be posted at the project site entrance and written notifications shall be provided a minimum of 30 days prior to initiation of project construction to residential land uses within 1,000 feet of the project site. The signs and written notifications shall include the following information: (a) Project Name; (b) Anticipated Construction Schedule(s); and (c) Telephone Number(s) for designated construction activity monitor(s) or, if established, a complaint hotline.
18. The designated construction monitor shall document and immediately notify EKAPCD of any air quality complaints received. If necessary, the project operator and/or contractor will coordinate with EKAPCD to identify any additional feasible measures and/or strategies to be implemented to address public complaints.
19. The main access roads through the facility 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, and delivery areas for operations materials (chemicals, replacement parts, etc.) will be paved or treated prior to taking initial deliveries.
20. Construction areas adjacent to any paved roadway below the grade of the surrounding construction area or otherwise directly impacted by sediment from site drainage shall be provided with sandbags or other equivalently effective measures to prevent run-off to roadways, or other similar run-off control measures as specified in the Storm Water Pollution Prevention Plan (SWPPP), only when such SWPPP measures are necessary so that this condition does not conflict with the requirements of the SWPPP.
21. 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 runoff resulting from the construction site activities is visible on the public paved roadways.

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;

b. Copies of any complaints filed with the EKAPCD 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-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 (A) off the project site and within 400 feet upwind of any regularly occupied structures not owned by the project owner or (B) 200 feet beyond the centerline of the construction of linear facilities indicate that existing mitigation measures are not resulting in effective mitigation. The AQCMP shall include a section detailing the additional mitigation measures described in the verification below and how they will be implemented to meet these fugitive dust control performance standards.

The AQCMM or Delegate shall implement the following procedures for additional mitigation measures if visible dust plumes as defined above 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 source. The project owner may appeal to the CPM any directive from the AQCMM or Delegate to shut down an activity, if 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 complaints filed with the EKAPCD 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 construction mitigation report that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling diesel construction-related emissions. Any deviation from the AQCMP mitigation measures shall require prior and CPM notification and approval.

The following off-road diesel construction equipment mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by **AQ-SC2**:

1. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the conditions set forth herein.

2. All construction diesel engines with a rating of 25 hp or higher shall meet, at a minimum, the Tier 4 Final California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title 13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. In the event that a Tier 4 Final engine is not available for any off-road equipment larger than 50 hp, a Tier 4 Interim or Tier 3 engine shall be used or that equipment shall be equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 3 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" for the following, as well as other, reasons.

    i. 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 or

ii. The construction equipment is intended to be on site for 10 days or less; or

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

3. 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 that a replacement for the equipment item in question meeting the controls required in item "b" occurs within 10 days of termination of the use, if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, if one of the following conditions exists:

   i. The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.

   ii. The retrofit control device is causing or is reasonably expected to cause engine damage.

   iii. The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.

   iv. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.

4. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer's specifications.

5. All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (such as concrete trucks) are exempted from this requirement. Notification shall be provided to trucks and vehicles in loading or unloading queues that their engines shall be turned off when not in use for more than 5 minutes.

6. Construction equipment will employ zero-emission or hybrid powertrains and electric motors when feasible.

7. Existing electric power sources shall be used to the extent feasible.

8. The hours of operation of heavy-duty equipment and/or the quantity of equipment in use shall be limited to the extent feasible.

Verification: The AQCMM shall include in the Monthly Compliance Report 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, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained; and

c. Any other documentation deemed necessary by the CPM, and the 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 New Source Review Permits: The project owner shall provide the CPM copies of any APCD issued Authority to Construct (ATC) and Permit to Operate (PTO) for the facility. The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the APCD or U.S. Environmental Protection Agency (U.S. EPA), and any revised permit issued by the APCD or U.S. EPA, for the project.

Verification: The project owner shall submit any ATC, PTO, and proposed air permit modification to the CPM within 5 working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

AQ-SC7 The project owner shall perform readiness testing and maintenance on only one (1) diesel-fired emergency generator or the diesel fire water pump in a single hour.

Verification: The project owner shall demonstrate compliance with this condition in the Quarterly Operational Reports.

AQ-SC8 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

COCs 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 no later than 30 days following the end of each calendar quarter.

District Final Determination of Compliance Conditions (EKAPCD 2024)

The following EKAPCD conditions apply to each unit of equipment, and the proposed facility as a whole.

0570001-003: 2,500-kW Kohler emergency generator set model KD2500, driven by 3,621-bhp Liebherr Machines Bulle Model KD62V12-6CNS, EPA Certified (Tier 4) diesel fueled piston engine with turbocharger, after cooler, and Selective Catalytic Reduction (SCR). (EPA family PLHAL103.ESP and S/N TBD).

0570004: Emergency fire pump, driven by 460-bhp Cummins Model QSX15, EPA Certified (Tier 3) diesel fueled piston engine with turbocharger and after cooler. (EPA family RCEXL015.AAH and S/N TBD).

AQ-1 Engine shall be equipped with turbocharger and charge air cooler. (Rule 210.1 BACT Requirement)

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

AQ-2 Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)

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

AQ-3 Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)

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

AQ-4 Total hours of operation (excluding maintenance and testing) shall not exceed 200 hours per year without prior District approval. (Rule 210.1)

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

AQ-5 Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)

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

AQ-6 Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)

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

AQ-7 Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft3 of gas at standard conditions. (Rule 404.1)

Verification: The project owner shall submit to the CPM a manufacturer's certification that the equipment complies with this limit as part of the Quarterly Operation Reports (AQ-SC8).

AQ-8 Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)

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

AQ-9 Operation of equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1)

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

AQ-10 Engine shall comply with the requirements of California Code of Regulations Title 17, Section 93115 (Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engine). (Cal. Code Regs., Tit. 17, Sections 93115 – 93115.15)

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

AQ-11 Maintenance and testing shall be limited to no greater than 50 hours per year. (Cal. Code Regs., Tit. 17, Section 93115)

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

AQ-12 Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)

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

AQ-13 Operating record of equipment shall be maintained in format approved in writing by District kept for a minimum of three years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine maintenance check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped), hours of operation for emergency use, hours of operation for maintenance and testing, hours of operation for all uses other than those specified in sections 93115.10(f)(1)(A) through (D), and the fuel used. (Cal. Code Regs., Tit. 17, Section 93115 and Rule 210.1).

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

AQ-14 No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and Health & Saf. Code, Section 41700)

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

AQ-15 Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

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

AQ-16 Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 209)

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

AQ-17 Maximum emissions rate of each air contaminant from each emergency generator shall not exceed following limits:

Particulate Matter (PM10):	0.02 gm/bhp-hr
	0.16 lb/hr
	3.83 lb/day
	0.02 ton/yr
Sulfur Oxides (SOx as SO2):	0.04 lb/hr
	0.88 lb/day
	4E-3 ton/yr
Oxides of Nitrogen (NOx as NO2):	0.50 gm/bhp-hr
	3.99 lb/hr
	95.80 lb/day
	0.40 ton/yr
Volatile Organic Compounds (VOC): (as defined in Rule 210.1)	0.50 gm/bhp-hr
	3.99 lb/hr
	95.80 lb/day
	0.40 ton/yr

Carbon Monoxide:	2.6 gm/bhp-hr
	20.76 lb/hr
	498.14 lb/day
	2.08 ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Verification: The project owner shall submit to the CPM operating data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). Compliance with hourly limits may be demonstrated by providing the CPM with a copy of the manufacturer's certification of emissions performance. Compliance with daily and annual limits may be demonstrated by multiplying hours of operation by manufacturer's certified emissions performance or EKAPCD-approved emission factors.

AQ-18 Maximum emissions rate of each air contaminant from the fire pump shall not exceed following limits:

Particulate Matter (PM10):	0.15 gm/bhp-hr (ATCM Standard)
	0.15 lb/hr
	3.65 lb/day
	0.02 ton/yr
Sulfur Oxides (SOx as SO2):	0.01 lb/hr
	0.12 lb/day
	1E-3 ton/yr
	2.85 gm/bhp-hr (ATCM Standard)

Oxides of Nitrogen (NOx as NO2):	2.89 lb/hr
	69.37 lb/day
	0.29 ton/yr
Volatile Organic Compounds (VOC): (as defined in Rule 210.1)	0.15 gm/bhp-hr (ATCM Standard)
	0.15 lb/hr
	3.65 lb/day
	0.02 ton/yr
Carbon Monoxide:	2.6 gm/bhp-hr (ATCM Standard)
	2.64 lb/hr
	63.28 lb/day
	0.26 ton/yr

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 210.1)

Verification: The project owner shall submit to the CPM operating data to demonstrate compliance with this condition as part of the Quarterly Operation Reports (**AQ-SC8**). Compliance with hourly limits may be demonstrated by providing the CPM with a copy of the manufacturer's certification of emissions performance. Compliance with daily and annual limits may be demonstrated by multiplying hours of operation by manufacturer's certified emissions performance or EKAPCD-approved emission factors.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

BIO-1 **Designated Biologist Selection.** The project owner shall assign at least one Designated Biologist to the project (multiple personnel may be required to ensure compliance with conditions of certification). The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the California Energy Commission (CEC) Compliance Project Manager (CPM) for review and approval.

The Designated Biologist must meet the following minimum qualifications:

1. Bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;

2. Three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society; and

3. At least three years of field experience with biological resources found in or near the project area.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.
For work related to Crotch's bumble bee and/or burrowing owl, the above qualifications shall also apply. In addition, the Designated Biologist(s) must meet the following minimum qualifications:

1. Knowledgeable in the biology and natural history of Crotch's bumble bee or burrowing owl, or both, exclusion and/or monitoring techniques as applicable, construction and operational impact monitoring;

2. Demonstrable experience implementing exclusion and/or monitoring techniques and construction and operational impact monitoring for Crotch's bumble bee or burrowing owl, or both;

3. Demonstrable experience implementing conditions of a CDFW Incidental Take Permit or acting as a Designated Biologist, or other experience implementing a CDFW Incidental Take Permit as a Biological Monitor.

Verification: The project owner shall submit to the CPM resumes and any other relevant documentation for Designated Biologist(s) approval at least 75 days prior to the start of site mobilization and/or construction-related ground disturbance activities. No site mobilization or construction related activities shall commence until a Designated Biologist has been approved by the CPM.
If a Designated Biologist needs to be replaced, the specified information regarding the proposed replacement must be submitted to the CPM at least ten working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

BIO-2 **Designated Biologist Duties.** The project owner shall ensure that the Designated Biologist performs the following during any site (or related facilities) mobilization, ground disturbance, grading, construction, operation, and decommissioning activities. The project owner may request approval from the CPM to terminate the Designated Biologist's function during plant operation in writing and provide justification of the request. However, the project owner shall appoint a replacement Designated Biologist at any time as directed by the CPM and will ensure the same duties are performed during closure activities.

If no Designated Biologist is available at any time during the life of the project (including operation phase) and the CPM determines that project-related actions may affect biological resources, the CPM may direct the project owner to assign a replacement Designated Biologist, for short-term or long-term monitoring and reporting. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the primary 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 resource conditions of certification;

2. Ensure that all conditions of certification are met and that all reporting standards for each COC are completed and submitted to the CPM and any other regulatory agencies in compliance with specified timelines.

3. Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the project owner;

4. Be available to supervise other biological resource staff, 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;

5. Ensure that all sensitive biological resource areas are flagged, delineated, or marked, and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;

6. Notify the CPM and CDFW of any observation of an unanticipated sensitive biological resource(s) encountered during all phases of the project. Unanticipated resources include sensitive species not addressed in the environmental document because of a perceived low potential to occur, species that are known to occur but have been proposed as a candidate for state or federal listing after the approval of the project, and common species whose range is unexpected in the project area. Notifications shall occur immediately and no later than the following morning, or Monday morning in the case of a weekend, or the next business day in the case of a state or federal holiday. The initial notification shall be followed by a formal written notification submitted to the CPM and CDFW within 48 hours of the observation.

7. 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. If site personnel perform these inspections, then they shall be trained by the Designated Biologist and the name of the personnel and date of training shall be included in a log in the Monthly Compliance Report.

8. 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 **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 WEAP components (**BIO-5**);

9. Ensure the implementation of the post construction conditions of certification;

10. Notify the project owner and the CPM and CDFW directly per the requirements of **BIO-4** of any non-compliance with any biological resources conditions of certification during all phases of the project. Notifications shall occur immediately and no later than the following morning, or Monday morning in the case of a weekend, or the next business day in the case of a state or federal holiday. The initial notification shall be followed by a formal written notification submitted to the CPM and CDFW within 48 hours of the non-compliance incident.

11. Notify the project owner, the CPM, and CDFW directly of any special-status species injury or mortality (notifications for Crotch's bumble bee or burrowing owl, are addressed per **BIO-13** and **BIO-19**) Notifications shall occur immediately and no later than the following morning, or Monday morning in the case of a weekend, or the next business day in the case of a state or federal holiday. The initial notification shall be followed by a formal written notification submitted to the CPM and CDFW within 48 hours of the observation.

12. Respond directly to inquiries of the CPM regarding biological resource issues by phone, email, or other correspondence;

13. Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the Monthly Compliance Reports and the Annual Compliance Report;

14. Train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and all permits; and

15. Maintain the ability to be in regular, direct communication with the CPM and representatives of CDFW, and USFWS, 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 submit in the Monthly Compliance Reports 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 Reports unless their duties cease, as approved by the CPM.

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

Verification: The project owner shall submit the specified information to the CPM for review and approval at least 30 days prior to the start of any site mobilization 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 or for species specific surveys, the specified information shall be submitted to the CPM for approval at least 10 days prior to their first day of monitoring activities.

BIO-4 **Designated Biologist and Biological Monitor Authority.** 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 resource conditions of certification.

1. If required by the Designated Biologist and/or Biological Monitor(s), the project owner's construction/operation manager shall halt all site mobilization, ground disturbance, grading, construction, and operation activities in areas specified by the Designated Biologist and/or Biological Monitor. The Designated Biologist shall:

2. 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;

3. Inform the project owner and the construction/operation manager when to resume activities;

4. The Designated Biologist or Biological Monitor shall notify the project owner and the CPM of any work stoppage of site mobilization, ground disturbance, grading, construction, and operation activities and associated non-compliance incidents; notifications shall occur immediately and no later than the following morning, or Monday morning in the case of a weekend, or the next business day in the case of a state or federal holiday;

5. Notify and advise the CPM of any corrective actions that have been taken or would be instituted as a result of the work stoppage; and

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

7. 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, or the next business day in the event of a state or federal holiday) 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.

BIO-5 **Worker Environmental Awareness Program (WEAP).** The project owner shall develop and implement a project-specific Worker Environmental Awareness Program (WEAP) and shall submit the draft WEAP for review and approval from the CPM and CDFW for review and comment. The WEAP shall be administered to all onsite personnel who will enter the project site including but not limited surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors (but excluding delivery personnel), biologists, cultural, tribal, and paleontological monitors. An abbreviated WEAP (WEAP Light) can be provided to vendors, such as delivery personnel (e.g., building materials, concrete, heavy equipment, etc.), who periodically enter the project site and are limited to areas such as existing access roads and/or lay down areas. The WEAP Light shall also be submitted for review and approval from the CPM. The WEAP shall be implemented during site mobilization, vegetation clearing, preconstruction, construction, commissioning, operation, non-operation, and closure. All workers must complete the WEAP prior to commencing work on the project. The WEAP and the WEAP Light may be recorded for later electronic viewing by new workers who begin work after the initial presentations.

The WEAP shall:

2. Be developed by or in consultation with the Designated Biologist (See **BIO-1**) and consist of an on-site or training center presentation in which supporting written material and electronic media in English, as well as Spanish or other languages, as applicable, including

photographs of protected species and their habitat, is made available to all participants;

2. Identify the lead agencies, provide an overview of the conditions of certifications, other regulatory permit requirements, and applicable LORS that must be complied with and the ramifications of non-compliance which may include fines, imprisonment, work stoppages, or loss of employment depending on the violation;

3. Identify the roles of environmental staff and define communication protocols and chain of command between environmental and construction staff. Define what actions monitors can approve such as stopping work under specific circumstances, providing guidance to comply with conditions, conducting surveys, and what actions monitors cannot approve such as directing work, expanding work areas from approved limits, changing conditions of certification requirements, or approving variances to permit conditions. Identify key field contacts and ensure that this information is posted in all break areas;

4. Provide examples of environmental signage and flagging that would be used to delineate work limits; areas for avoidance, state and or federal drainages, or other protected areas, evacuation routes, and approved staging areas;

5. Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas, and explain the reasons for protecting these resources; provide information to participants that no snakes or other wildlife shall be intentionally harmed (unless posing a reasonable and immediate threat to humans);

6. Describe standard environmental commitments and best management practices that apply to the project including but not limited to: storing trash in closed receptables and removing weekly to prevent attracting animals, capping pipes and other cavities that could be used by birds and small mammals; collecting and removing the carcasses of dead animals; limiting work to daytime hours, limiting work during periods of high rainfall, preventing vehicles and equipment from operating within a stream unless specifically authorized by other permits or conditions of certification; restricting smoking to designated areas; storing chemicals and fuel in designated areas; spill prevention measures; and reporting requirements.

7. Identify project vehicle speeds on paved and unpaved access roads;

8. Place special emphasis on the protection of nesting birds, species of special concern and listed species including pictures and information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;

9. Provide pictures of the sensitive plants and wildlife known to occur in the project area, including western Joshua tree, Crotch's bumble bee, desert tortoise, legless lizards, Swainson's hawk, bald and golden eagles, burrowing owl, loggerhead shrike, Mohave ground squirrel, American badger, desert kit fox, ringtail, and other sensitive plants and wildlife. Provide information on sensitivity to human activities, legal protection, reporting requirements, and how to identify construction avoidance zones for these species as marked by flagging, staking, or other means, as described above;

10. Provide an overview for all personnel of the risk of potential impacts to small mammals, birds, and reptiles from vehicle strikes on all project roads (paved and unpaved) during construction, operations, closure phases, reporting requirements, and protection measures;

11. Describe the risk of wildfires in desert communities and the measures that will be taken to reduce these risks such as avoiding parking in tall vegetation, limits to where workers can smoke; the locations of fire safety equipment, contact information and the procedure should a wildfire be ignited, required tools for each piece of equipment such as a shovel, Pulaski, and fire extinguisher, restrictions on welding and controlled detonations, use of the Project Activity Level (PAL) system that describes what activities can occur based on specific weather conditions including Red Flag days;

12. Provide an overview of potential impacts to avian and bat species from collisions with the cooling towers, generation tie-line, and other features associated with the operations phase, reporting requirements, and protection measures;

13. Identify whom to contact if there are further comments and questions about the material discussed in the program; and

14. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines. A small wallet card or pamphlet with key contacts and resource information shall be prepared and provided after the

training. A hard hat sticker shall also be provided to each worker to demonstrate to the monitors that they have participated in the training.

15. The WEAP Light shall include a summary of the items above as they relate to the limited areas that vendors need to access such as existing access roads and/or lay down areas.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist and documented within the Monthly Compliance Reports.

Verification: At least 45 days prior to start of site mobilization the project owner shall provide to the CPM for review and approval 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. At least 10 days prior to site mobilization the project owner shall submit the approved final WEAP and implement the training for all workers.

The project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. Training acknowledgement forms signed during construction shall be kept on file by the project owner for at least 6 months after the start of commercial operation.

Throughout the life of the project, the WEAP shall be repeated annually for permanent operational employees, and shall be routinely administered within 1 week of arrival to any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the project area. Training acknowledgement forms shall be maintained by the project owner and shall be made available to the CPM upon request. Workers shall receive and be required to visibly display a hard-hat sticker or certificate that they have completed the training.

During Project operation, signed statements for operational personnel shall be kept on file for 6 months following the termination of an individual's employment.

BIO-6 Biological Resources Mitigation Implementation and Monitoring Plan. The project owner shall develop a Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP). The project owner shall provide the draft BRMIMP to the CPM for review and comment. No site mobilization or construction activities may occur prior to approval of the final BRMIMP by the CPM. Under no circumstances shall ground disturbance proceed without implementation of all applicable permit conditions.

The BRMIMP shall be prepared in consultation with the Designated Biologist and shall include the following:

1. All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the project owner;

2. All biological resources conditions of certification identified as necessary to avoid or mitigate impacts;
3. All biological resource mitigation, monitoring, and compliance measures required in state or federal agency terms and conditions, such as those provided in the National Pollution Discharge Elimination System (NPDES) Construction Activities Stormwater General Permit and Waste Discharge Certification;
4. A discussion of all sensitive biological resources that could be impacted by project site mobilization, construction, operation, and decommissioning;
5. A detailed description of measures that shall be taken to avoid or mitigate impacts on each special-status species potentially impacted by construction and operation, including remedial actions;
6. All required mitigation measures for each sensitive biological resource;
7. All locations on a map, at an approved scale (typically 1:6,000 or other scale with CPM approval), of special-status biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction and operation;
8. Aerial photographs, at an approved scale (typically 1:6,000 or other scale with CPM approval), of all areas to be disturbed during project construction activities; include one set prior to any site or related facilities mobilization disturbance and one set subsequent to completion of project construction. The aerial photographs shall include a reference map that shows the aerial map location in reference to the project site, reference key on each aerial, and displays the project boundary. Provide planned timing of aerial photography and a description of why times were chosen;
9. Provide a final accounting of the before/after whole acreages and a determination of whether more ~~or less~~ habitat compensation is necessary;
10. All measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
11. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
12. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
13. All performance standards and remedial measures to be implemented if performance standards are not met;

14. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval;
15. All final versions of required plans including WEAP, Vegetation Management Plan, Weed Control Plan, Invasive Species Management Plan, Nesting Bird Management Plan, and all other individual biological mitigation and/or monitoring plans associated with the project shall be included as attachments; and
16. 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: The project owner shall submit the draft BRMIMP to the CPM for review and approval at least 45 days prior to start of any site mobilization. The project owner shall provide the final BRMIMP to the CPM at least 10 days prior to start of any site mobilization.

If any federal permits have not yet been received when the final BRMIMP is submitted, these permits shall be submitted to the CPM within 5 days of their receipt, and the BRMIMP shall be revised or supplemented to reflect the permit condition(s). The project owner shall submit to the CPM and CDFW the revised or supplemented BRMIMP within 10 days following the project owner's receipt of any additional federal permits. Any changes to the approved BRMIMP shall be submitted to the CPM at least 10 days prior to implementation and must be approved by the CPM in consultation with CDFW prior to implementation.

Implementation of BRMIMP measures shall be reported in the Monthly Compliance Reports by the Designated Biologist (e.g., survey results, construction activities that were monitored, non-compliance incidences and resolution, species observed, etc.). Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying which items of the BRMIMP have been completed, a summary of all CPM-approved modifications to mitigation measures made during the project's site mobilization and construction activities, and which mitigation and monitoring items are still outstanding.

To verify that the extent of construction disturbance does not exceed that described in these conditions, the project owner shall submit aerial photographs, at an approved scale, taken before and after construction to the CPM and CDFW. The first set of aerial photographs shall reflect site conditions prior to any preconstruction site mobilization and construction activities and shall be submitted prior to initiation of such activities. The second set of aerial photographs shall be taken subsequent to completion of construction and shall be submitted to the CPM for review and approval, and CDFW for review and comment, no later than 30 days after completion of construction. The project

owner shall also provide a final accounting in whole acres of vegetation communities/cover types present before and after construction no later than 30 days after completion of construction. Construction acreages shall be rounded to the nearest acre. The project owner shall also provide GIS shapefiles of all pre-and post-disturbance areas no later than 30 days after completion of construction.

BIO-7 General Impact Avoidance and Minimization Measures. The project owner shall ensure implementation of 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. Avoid Controlled Detonations at Night. Controlled detonations shall be limited to daylight hours and shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise, unless authorized by the CPM. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located. The schedule of controlled detonations shall be provided to the Designated Biologist and/or Biological Monitors. The Designated Biologist and/or Biological **M**~~m~~onitors shall monitor, observe, and record wildlife reactions during the controlled detonations to assess animal behavior and to determine how species in adjacent habitat are affected, unless approved by the CPM to discontinue monitoring.
2. Limit Disturbance Areas. The boundaries of all areas to be temporarily or permanently disturbed (including staging areas, access roads generation tie-line pole locations, etc.) shall be delineated with stakes and flagging prior to any site mobilization, vegetation clearing, ground disturbance, or construction activities in consultation with the Designated Biologist. All construction sites, laydown areas, and parking locations shall be fenced to prevent potential access to the site by small animals including but not limited to desert tortoise. Fencing shall not be required around generation tie-line line pole locations. Any deviations of the fencing requirements shall be approved by the CPM. Spoils shall be stockpiled away from the edges of drainages and stabilized to ensure sediment laded water does not enter the drainage. All disturbances, vehicles, and equipment shall be confined to the flagged areas.
3. Minimize Road Impacts. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be

clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

4. Minimize Traffic Impacts. Vehicular traffic during project site mobilization, construction and operation shall be confined to existing routes of travel to and from the project site, and cross-country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 25 miles per hour on paved or stabilized unpaved roads within the project area, on maintenance roads for linear facilities, or on access roads to the project site. No vehicle shall exceed 10 miles per hour on unpaved areas within the project site, except on stabilized unpaved roads. Project vehicles shall abide by posted speed limits on paved public roads outside the project site.
5. Inspect Pipes and Trenches. At the end of each workday, the Designated Biologist, Biological Monitor, and/or site personnel (approved and trained by the Designated Biologist, as described under **BIO-2**) 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 shall immediately notify the Designated Biologist and/or Biological Monitor. If backfilling is not feasible, all trenches, bores, and other excavations shall be covered to prevent wildlife entrapment or sloped at a 3:1 ratio at the ends to provide wildlife escape ramps. Should wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the animal to a safe location. Any wildlife encountered during construction shall be allowed to leave the construction area unharmed.
6. Prevent Wildlife Entrapment. All pipes, tubes, ducting, or other cavities shall be capped to prevent wildlife entrapment. Portable toilets shall require vent pipes to be screened to prevent cavity using birds from becoming trapped in the pipe.
7. Reservoir Management Plan. The project owner shall submit a Reservoir Management Plan to the CPM for review and approval, in consultation with CDFW, prior to construction of the reservoir. The Plan shall include information on how wildlife entrapment shall be minimized at the reservoir. This shall include fencing height, type of fencing material (e.g., privacy slats, mesh size) number and location of wildlife escape ramps, inspection and reporting procedures, annual reporting of the number and type of species entrapped, injured, or killed. Fencing shall be designed to serve as a visual barrier and effectively deter wildlife from entering the enclosed reservoir area.

The Plan shall include details of the design of the floating interlocking reservoir cover, including features that minimize wildlife impacts, and identify additional wildlife deterrent measures as needed to prevent access and contact with reservoir water. Measures shall address both the installation and operation phases of the reservoir to avoid and minimize impacts to wildlife.

In addition, the Plan shall include a process for evaluating the efficacy of the cover, ramps, and other wildlife protection features with monthly reporting during the first year of reservoir operation and annual reporting thereafter for the life of the project, unless an alternative reporting schedule is approved by the CPM. **Monthly reports during Year 1 shall include inspection dates, status of all exclusion features, and a log of observed or reported wildlife interactions. Annual reports shall summarize all wildlife incidents, deterrent maintenance actions, and recommendations for improvements.**

If any state or federally listed species are found to be injured or killed as a result of reservoir operations, the project owner shall notify the CPM and CDFW and shall implement appropriate remedial actions as directed by the CPM, in consultation with CDFW. The Plan shall outline potential remedial measures, including modifications to exclusion features, installation of wildlife deterrents, operational changes, or habitat protection actions, subject to CPM review and approval. ~~**If more than five non-listed wildlife mortalities or one mortality of a state or federally listed species occurs within any 12-month period, the project owner shall be required to submit a Corrective Action Plan to the CPM within 7 calendar days of reaching the threshold and implement all approved corrective measures.**~~ **The CPM, in consultation with CDFW, may require amendments to the Reservoir Management Plan based on mortality** ~~**trends, species affected**~~**, or recurring deficiencies in deterrent infrastructure. The goal of the Plan shall be to ensure that wildlife mortality is avoided** ~~**minimized to a level of fewer than two incidents per quarter (non-listed species), and zero listed species mortality annually.**~~

8. Unexpected Wildlife. The Designated Biologist or Biological Monitor shall ensure that any unexpected special-status wildlife species such as California condor, desert tortoise, Mohave ground squirrel, or other species are fully avoided during construction. Should an unexpected wildlife species be detected a non-disturbance buffer shall be implemented based on the species ecology or species-specific condition of certification, and work shall be suspended in that

area until the animal leaves on its own volition. Any observations of unexpected wildlife should comply with notification requirements provided in **BIO-2**, Item 6.

9. Bat Roost Protection and Mitigation

a) Active Bat Maternity or Hibernacula. If active maternity roosts or hibernacula are found during surveys by an approved bat biologist, submitted for approval under **BIO-3**, the structure, tree or feature occupied by the roost shall be avoided (i.e., not removed) until the young have matured or the hibernacula period is over. When an active maternity roost or hibernacula is present within 500 feet of a construction site an approved bat biologist shall conduct an initial assessment of the roost's response to construction activities including controlled detonations and recommend buffer expansion if there are signs of disturbance from the roost. The buffer may be adjusted based on site conditions, topography, type of work activity, or other ecological evidence, with the approval of the CPM.

b) Avoid Removing or Disturbing Bat Roosts. Active bat roosts shall not be disturbed and shall be provided a minimum buffer of 300 feet where pre-existing disturbance is moderate or 500 feet where preexisting disturbance is minimal. Moderate disturbance may include areas subject to regular human activity or traffic noise up to 60 dBA and limited artificial lighting. Minimal disturbance refers to areas with little or no recent human activity, low ambient noise levels (typically below 45 dBA), no artificial lighting, and a generally undisturbed natural setting. All buffer distances and need for monitoring active maternity roosts or hibernacula shall be approved by the CPM.

If suitable roost sites are to be removed, or otherwise impacted by the project, the approved bat biologist shall conduct targeted roost surveys of all identified sites. A minimum of two separate survey visits shall be conducted at each potential roost site, unless fewer surveys are approved by the CPM. Surveys shall be timed to capture variation in bat use and environmental conditions. If initial results are inconclusive or as recommended by the bat biologist, additional survey visits may be required by the CPM.

c) Roost Site Removal. A qualified bat biologist shall survey potential roost sites prior to their disturbance or removal, per Item 8b. Any structures (natural or artificial) that show evidence of significant bat use within the past year should be retained whenever feasible. If such a structure must be removed or disturbed, the project owner shall create alternative roost sites in coordination with the CPM and CDFW. If removal or disturbance of trees or other identified roost sites cannot be avoided, removal of active roost sites shall be

conducted outside the maternity season to avoid mortality of maternity colonies.

10. Prepare a Wildlife Protection and Relocation Plan. The project owner, in coordination with the Designated Biologist, shall prepare a Wildlife Protection and Relocation Plan (WPRP) to provide guidance and protocols when avoiding or handling common and sensitive species that are located within the project area. The WPRP shall include measures for handling rattlesnakes or other snakes found in or near work areas and access roads and provide these guidelines to all Biological Monitors, safety staff, and other personnel. Killing or harming rattlesnakes or other wildlife is not authorized, unless there is an immediate and unavoidable threat to human safety and relocation is not feasible. The WPRP shall include methods to salvage or relocate common and sensitive wildlife during ground disturbance activities including clearing, grubbing, and grading operations when feasible to off-site habitat or out of harm's way. The species shall be salvaged or relocated when conditions will not jeopardize the health and safety of the Designated Biologist or Biological Monitor;
11. Minimize Lighting Impacts. To minimize adverse effects of artificial light on wildlife, exterior lighting fixtures associated with project construction shall be downward facing, fully shielded, and designed and installed to minimize backscatter, reflection, minimize skyward illumination, minimize spillover onto adjacent wildlife habitat. Lights used shall be lower on the light spectrum (lower Kelvins with fewer short-wavelength blue light emissions);
12. Use Non-toxic Soil Binders. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants and shall be approved by the CPM prior to use;
13. Minimize Impacts from Pest Control. Anticoagulants shall not be used for rodent control. Pre-emergent and other herbicides with documented residual toxicity shall not be used. Herbicides shall be applied in conformance with federal, State, and local laws and according to the guidelines for wildlife-safe use of herbicides in **BIO-9** (Integrated Weed Management Plan);
14. Minimize Standing Water. 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 to prevent the formation of puddles, which could attract predators of special-status species 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;

15. Handling of Road-killed Animals. Report all inadvertent deaths of special-status species to the appropriate project representative, including roadkill. Species name, identifiable physical characteristics of the animal (sex, age class, length, weight), and other pertinent information shall be noted and reported in the Monthly Compliance Reports. During construction, injured or dead animals detected by personnel in the project area shall be reported immediately to the Designated Biologist and/or Biological Monitor, who shall remove the carcass or injured animal promptly. During operations, the Environmental Compliance Monitor for the project owner shall be notified and they shall contact the Designated Biologist and/or Biological Monitor for further instructions. The Designated Biologist shall notify the project owner, the CPM, and CDFW directly of any special-status species injury or mortality. Notifications shall occur immediately and no later than the following morning, or Monday morning in the case of a weekend, or the next business day in the case of a state or federal holiday per **BIO-2**. Additionally, the Designated Biologist shall contact the CPM, CDFW and/or USFWS within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. The project owner shall follow instructions that are provided by the appropriate agency contact. The veterinary fees for the treatment of injured wildlife shall be covered by the project owner for project-related injuries or wildlife found injured on the project site.

16. Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper working conditions to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials or wastes. The Designated Biologist and/or Biological Monitor shall be informed immediately of any hazardous spills. 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;

17. Remove Trash Weekly. During construction all trash and food-related waste including micro-trash shall be placed in secure, self-closing containers to prevent access by wildlife and removed weekly or more frequently from the site. Workers shall not feed wildlife or bring pets to the project site;

18. No Firearms. Except for law enforcement or security personnel, no workers or visitors to the site shall bring firearms or weapons to the project site;
19. Avoid Use of Toxic Substances. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants;
20. Minimize Disturbance Areas. 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;
21. Weed and Monofilament Free Wattles. Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations. Monofilament plastic shall not be used for erosion control. In addition, non-native species shall not be used in landscaping plans and erosion control;
22. Conform to APLIC Guidelines. The generation tie-line and all associated 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), or most recent APLIC guidance, to reduce the likelihood of large bird electrocutions and collisions;
23. Aviation Lighting. If required, to the extent feasible, any aviation warning lighting shall employ only strobed, strobe-like or blinking incandescent or LED lights, preferably with all lights illuminating simultaneously. Minimum intensity, maximum "off-phased" dual strobes are preferred, and no steady burning lights (e.g., L-810s) shall be used;
24. Herbicide Use. 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, per **BIO-13** If rodent control must be conducted, zinc phosphide or an equivalent product shall be used; and

25. Minimize Stormwater Impacts. Standard best management practices (BMPs) from the project Storm Water Pollution Prevention Plan shall be implemented during all phases of the project (construction, operation, and decommissioning) where storm water run-off from the site could enter adjacent drainages. Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the jurisdictional waters. All disturbed soils within the project site shall be stabilized to reduce erosion potential, both during and following construction.

Verification: All general impact avoidance and minimization measures shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported by Designated Biologist in the Monthly Compliance Reports during construction and reported in Annual Compliance Reports during operation, including but not limited to the requirements cited above and in **BIO-2**.

The project owner shall submit the draft Reservoir Management Plan to the CPM for review and comment, in coordination with CDFW, at least 45 days prior to the start of any construction-related activities associated with the reservoir. The project owner shall provide the final Reservoir Management Plan to the CPM at least 10 days prior to any construction-related activities associated with the reservoir.

The project owner shall submit the draft WPRP to the CPM for review and comment at least 45 days prior to the start of project site mobilization. The project owner shall provide the final WPRP to the CPM at least 10 days prior to project site mobilization.
Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

BIO-8 **Vegetation Management Plan.** The project owner shall develop a Vegetation Management Plan (VMP). The VMP shall contain the requirements to stabilize temporarily disturbed areas, including proposed stabilization measures, seed mixes, schedules, success criteria, reporting requirements, and any remediation activities. No site mobilization or construction activities may occur prior to approval of the final VMP by the CPM.

The VMP shall be developed by a qualified botanist or restoration ecologist approved by the CPM. The Plan shall identify all areas of permanent and temporary impacts and describe how temporarily disturbed areas in desert areas shall be stabilized to prevent the establishment and spread of invasive species. Invasive weeds are defined as Cal-IPC High or Moderate species except where allowances for annual grasses as described below.

The Plan shall specify success criteria and materials and methods for site preparation, reseeding, maintaining, and monitoring revegetated areas in

the following categories. Successful establishment of native desert scrub communities is not required as temporary impacts are being considered permanent to offset impacts to listed species and revegetation efforts shall include an initial seeding event followed by weed management.

A. The goal of revegetation on these sites shall be stabilize disturbed areas and prevent the establishment of Cal-IPC High or Moderate species that could colonize adjacent habitats. Permanent and temporary impacts shall be off-set through compensatory mitigation (**BIO-14**);

B. At a minimum, all temporary disturbed areas shall be recontoured, scarified, and stabilized with a seed mix consisting of local natives, including grasses and wildflowers preferred by Crotch's bumble bee, and shrubs.

At a minimum the VMP shall include but not be limited to the following requirements.

1. **Site Maps.** The Plan shall include the types and acreages of habitats to be restored. These areas shall be identified on maps with sufficient detail for a desktop review and provided as GIS files. The Plan shall provide drawings and or schematics outlining the location of seeding and or plantings.

2. **Revegetation Methods.** Describe the methods of active revegetation to be used depending on site location and habitat Active revegetation is defined as any area that receives seed or container plants, irrigation (if proposed), weeding, and monitoring.

a. The methods shall include any proposed site preparation such as topsoil salvage, re-contouring, decompaction, pre-installation weeding, or other proposed methods.

3. **Topsoil Salvage Requirements**. Topsoil and the seed bank it contains, shall be conserved on areas where soil is excavated to the degree possible based on the five year construction timeframe, or alternate timeframe as approved by the CPM. Topsoil salvage shall occur provided the area does not support any Cal-IPC Rank Moderate or High with the exception of Brome and Mediterranean grasses. Salvage shall be accomplished by:

a. Woody material such as Joshua trees shall be removed from the soil surface and piled in an area that will be out of the way during construction. The upper 6 to 8 inches of soil, where present, shall be scraped from the disturbance footprint and piled into a windrow in an area that shall not be disturbed during construction.

b. Topsoil stockpiles shall be clearly marked for avoidance.

c. Windrows shall be immediately protected from wind and rain erosion by covering them or hydro-mulching. Erosion protection shall be renewed as needed.

d. Salvaged topsoil shall be respread on areas that shall be revegetated following construction. Salvaged topsoil versus subsoil shall be used for this purpose unless the location is identified as weed infested using the methods outlined in **BIO-9**.

4. **Seed Mix and Application.** Describe the proposed seed mix, quality control requirements, and application methods such as hydroseeding, broadcast seeding, imprinting, use of container plants, cuttings, or other treatments.

a. The proposed seed mix shall be acquired from local sources unless approved by the CPM, in consultation with CDFW.

b. Describe the timing of the seed application and measures to ensure that hydroseeding equipment has been cleaned prior to use on the project site.

c. The methods shall describe any proposed use of slurry binders, soil stabilizers, or use of mycorrhizal fungi.

d. Describe the proposed timing of the seeding and other revegetation efforts such as container plantings, cuttings, or other methods.

e. It is recommended that coarse woody debris from damaged Joshua trees be strategically placed across the revegetation areas to foster the development of micro habitats for plants and wildlife.

5. **Success Criteria.** The VMP shall include success criteria and percent cover for each of the proposed temporarily disturbed areas. Prior to initial ground disturbance of any areas that would be treated, the restoration ecologist shall develop a baseline goal for treatment including the percentage cover and type of weeds and the grass and forb cover. The goal of the VMP is to prevent the establishment of high-priority invasive weeds that are considered controllable (i.e. species that can be effectively suppressed or eliminated through standard management practices) such as Russian thistle (*Salsola tragus*) and Sahara mustard (*Brassica tournefortii*).

After 5 years upland areas shall be dominated by native annuals, forbs, and low growing perennials with a total cover of 60 percent. Cover of

high-priority invasive species rated by Cal-IPC High or Moderate species shall not exceed 5 percent total cover with the exception of brome grasses (*Bromus* spp.) or Mediterranean grass (*Schismus barbatus*), which shall be managed to the extent feasible to control spread.

6. **Implementation Schedule.** The VMP shall include a defined implementation schedule and plan including any revegetation activities including conducting biological or cultural resources clearance surveys, avian monitoring, or other license requirements; ensuring soil conditions are prepared for treatment, and the implementation of any required erosion control devices.

7. **Site Preparation.** All work areas shall be clearly delineated prior to revegetation work; and this shall include any soil preparation measures, including locations of recontouring, de-compacting, imprinting, or other treatments; details for topsoil storage, as applicable; plant material collection and acquisition guidelines, plants from the project site, as well as obtaining replacement plants from outside the project area (sources for plant materials shall be limited to locally occurring native species from the local area if needed); a plan drawing or schematic depicting the temporary disturbance areas described above; time of year that the planting or seeding shall occur and the methodology of the planting; a description of the irrigation, if used; success criteria; a monitoring program to measure the success criteria, commensurate with the Plan's goals and contingency measures for failed revegetation efforts not meeting success criteria.

8. **Plant Acquisition.** Plant acquisition shall be limited to locally collected seed, and cuttings if used, unless approved by the CPM, in consultation with the CDFW.

9. **Final Site Grading and Seeding.** The VMP shall include proposed plans for final site grading and seeding, developed in consideration of site-specific conditions and subject to approval by the CPM. At final grade, the last few inches shall not be compacted to more than 75 percent to facilitate penetration by plant roots, unless otherwise approved by the CPM based on soil type and site conditions. Salvaged topsoil shall be spread over the finish grade, which shall retain surface roughness, such as small ridges, where appropriate to enhance seedling wind protection and moisture collection from rain and fog.

Hydroseed or drill seeding with soil stabilization seed mixture shall be applied between October 1 and mid-November, unless alternate

timing is approved by the CPM. The hydroseed or drill seed mix shall contain a mulch and binder to retard wind erosion by providing a crust over the soil surface. Native plant seeds shall be added to the hydroseed mixture or hand broadcasted onto the site just prior to hydroseeding. Care shall be taken to avoid premature germination of native species caused by prolonged immersion in the hydroseeding equipment.

On slopes, the project owner shall augment the erosion control seed mixture with seed of species native to the region, based on seed availability and habitat conditions. Seed mixtures appropriate for desert habitats shall be developed using native species sourced from the region and shall be approved by the CPM. The VMP shall include details of seed sources, application methods, and any proposed deviations from these guidelines with supporting rationale.

10. **Maintenance and Monitoring**. The revegetation areas shall be monitored and maintained for a minimum of 5 years by a qualified botanist or restoration ecologist. At the end of the five-year monitoring period the qualified botanist or restoration ecologist in consultation with the Designated Biologist shall prepare a final monitoring report detailing the success of the revegetation efforts and shall provide recommendations, if needed. This final monitoring report shall be submitted to the CPM for review and approval. After the initial 5-year monitoring period, the CPM shall determine if additional monitoring or remedial actions are required.

Invasive weed management shall be started within 3 months of planting or seeding, or earlier if weeds have begun to flower, unless alternate timeframe is approved by the CPM. Weeding shall proceed as frequently as necessary to prevent weeds from spreading off the project site into the adjacent area and to prevent seed set. An effort shall be made to cut weeds before they develop seeds to minimize the spread of invasive weeds. Any new Cal IPC High or Moderate species weed species not currently present in the project area prior to construction shall be eradicated (see **BIO-9** and **BIO-10**).

11. **Reporting.** Quarterly and annual revegetation status reports shall include a map of all areas planted or managed, percent weed cover, status of revegetation efforts including percent native cover and survivorship, and any remedial actions taken.

Verification: The project owner shall submit the draft VMP to the CPM for approval at least 45 days prior to start of any site mobilization. The project owner shall provide the final VMP to the CPM and CDFW at least 7 days prior to start of any site mobilization. Any changes to the approved VMP must be approved by the CPM. Quarterly, annual, and

final revegetation status reports shall be submitted to the CPM for review and approval no more than 30 days after each reporting period.

BIO-9 **Integrated Weed Management Plan.** The project owner shall develop an Integrated Weed Management Plan (IWMP). The IWMP shall be prepared in consultation with the Designated Biologist and shall include accurate and up-to-date maps depicting the location of weed occurrences across the project site and generation-tie line alignment. The IWMP shall be submitted to the CPM for review and approval. The IWMP shall contain all required measures to identify, control, and manage existing and potential weed infestations on the project site. No site mobilization, ground disturbance, or construction activities may occur prior to approval of the final IWMP by the CPM. The IWMP shall be implemented prior to any site mobilization, and during the construction, operation, and decommissioning phases of the project.

1. **Weed Definition.** The IWMP shall describe the methods of preventing or controlling the introduction or spread of weeds or new weed infestations. For the purposes of the IWMP, "weeds" shall include all plants designated as noxious weeds or pest plants by the California Department of Food and Agriculture (CDFA), including those listed in Title 3, California Code of Regulations Section 4500 or assigned a CDFA pest rating of A, B, or Q, or the agencies most recent ranking system. Weeds shall also include any other non-native plant species ranked in the *California Invasive Plant Inventory* by the California Invasive Plant Council (Cal-IPC) or its most recent ranking system.
2. **Weed Risk Assessment.** The IWMP shall provide an assessment of the project's potential to spread invasive non-native weeds rated Cal IPC High or Moderate species into new areas, or to introduce new non-native invasive weeds into the project site. This IWMP must list known and potential non-native and invasive weeds occurring on the project site and in the project region and identify threat rankings, including Cal-IPC and CDFA, and potential consequences of project-related occurrence or spread for each species.

   This assessment shall include, but is not limited to, weeds that (1) are currently ranked as having a high or moderate for ecological impact in the California Invasive Plant Inventory maintained by the Cal-IPC (Cal-IPC 2025), (2) aid and promote the spread of wildfires, and (3) have the potential to displace native vegetation communities.
3. **Success Criteria.** The IWMP shall identify goals for control of each species (e.g., eradication, suppression, or containment) likely to be

found within the project area. The goals shall include the following success criteria:

- With the exception of brome and Mediterranean grasses which are ubiquitous in the project area, all plant species with rates of dispersal and establishment listed as "High" or "Moderate" on the California Invasive Plant Inventory shall have documented absence, or have been removed from the site for at least three years, for the CPM to deem the site control successful.
- The site shall not contain more than 5% exotic plant species rated by Cal-IPC as High or Moderate for the CPM to deem the site control successful.

The IWMP shall include the following measures to guide weed inventory, prevention, control, and monitoring activities:

4. The project owner shall inventory the entire project site, covering all areas subject to ground-disturbing activity, including, but not limited to, construction work sites, staging areas, and any potential new or improved access roads. Weed occurrences shall be mapped and described according to species, density, and area covered. The map shall be updated at least once per year during the construction phase.
2. Weed infestations identified in the pre-construction weed inventory shall be evaluated to identify potential for project-related spread. The IWMP shall identify any infestations to be controlled or eradicated prior to start of project construction, or other site-specific weed management requirements (e.g., avoidance of soil transport and site-specific vehicle washing where threat or spread potential is high).
3. The CPM shall be notified via email within 30 days if any weed species detected on the project site has not been previously recorded in Kern or Los Angeles County, based on available records from the CDFA, the Cal-IPC, the Calflora Database, or other relevant regional floristic data sources.
4. Control and follow-up monitoring of pre-construction weed treatment sites shall follow methods identified in appropriate sections of the IWMP. The monitoring section shall also describe methods for post-eradication monitoring to evaluate success of control efforts and any need for follow-up control.
5. The IWMP shall specify methods to minimize potential transport of weed seeds onto the project site, or from one section of the project site to another. The project site may be divided into "weed

zones," based on known presence or likelihood of invasive species in specific areas. The IWMP shall specify inspection procedures for construction materials and equipment entering the project area. Vehicles and equipment shall be inspected and cleaned at entry points to specified portions of the project site, and prior to leaving work sites where weed occurrences must be contained locally.

6. The IWMP shall include prevention measures based on Prevention Best Management Practices for Transportation and Utility Corridors (https://www.cal-ipc.org/resources/library/publications/tuc/) and Cal-IPC's Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers (https://www.cal-ipc.org/resources/library/publications/landmanagers/) or most recent guidance.
7. Construction equipment shall be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Equipment shall be inspected to ensure it is free of any dirt or mud that could contain weed seeds, and the tracks, outriggers, tires, and undercarriages shall be thoroughly washed, as needed. Special attention shall be given to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g., pick-up trucks) that frequently enter and exit the site shall be inspected and washed on an as-needed basis. Tools (e.g. chainsaws, hand clippers, pruners, etc.) shall also be cleaned of dirt and mud before entering project work areas.
8. All vehicles shall be washed off-site when possible. If off-site washing is infeasible, on-site cleaning stations shall be set up at designated locations to clean equipment before it enters the work area. Wash stations shall be located away from native habitat or special-status species occurrences. Wastewater from cleaning stations shall not be allowed to run off the cleaning station site. A daily log shall be maintained for all vehicle and equipment washing activities stating the location, date and time, types of equipment, methods used, and personnel present.
9. Erosion control materials (e.g., straw wattles, hay bales) shall be certified free of weed seed before they are brought onto the site. The IWMP shall prohibit on-site storage or disposal of mulch or green waste that may contain weed material. Mulch or green waste shall be removed from the site in a covered vehicle to prevent seed dispersal and transported to a licensed landfill or composting facility.

10. The IWMP shall specify guidelines for any soil, sand, gravel, mulch, or fill material that will be imported into the project area, transported from site to site within the project area, or transported from the project area to an off-site location, to prevent the introduction or spread of weeds to or from the project area.
11. The IWMP shall specify methods to survey for weeds during construction and operation; and shall identify the botanists responsible for weed monitoring and identification. The botanists shall be approved pursuant to **BIO-1** and/or **BIO-3**. The IWMP shall include a monitoring schedule to ensure timely detection and immediate control of weed infestations to prevent further spread. Surveying and monitoring for weed infestations shall occur at least two times per year, to coincide with the early detection period for early season and late season weeds (i.e., species germinating in winter and flowering in late winter or spring, and species germinating later in the season and flowering in summer or fall).
12. The IWMP shall include methods for marking invasive weeds on the project site and for recording and communicating these locations to weed control personnel. The map of weed locations (referenced above under Item 1) shall be updated at least annually and provided to the CPM in both Arc-GIS -compatible digital format (e.g. shapefiles) and PDF map format.
13. The IWMP shall specify manual and chemical weed control methods to be employed. The IWMP shall include only weed control measures with a demonstrated record of effectiveness for target weeds, based on the best available information, including relevant agency guidance, peer-reviewed studies, and documented control successes for the target species. The plan shall describe methods for promptly scheduling and implementing control activity when any weed infestation is present, to ensure timely and effective weed control. Weed infestations shall be controlled or eradicated within 10 days upon detection, and prior to seed production, to prevent further spread. If detected after seed production, measures shall be taken to prevent further spread, including containment, seed removal, and increased monitoring.
14. All proposed weed control methods must minimize the extent of any disturbance to native vegetation, limit ingress and egress to defined routes, and avoid damage from herbicide use or other control methods to any environmentally sensitive areas identified within or adjacent to the project site. Herbicide use must comply

with the following restrictions unless approved by the CPM in consultation with CDFW.

a. Herbicide applicators must follow the best management practices described by the Guidance to Protect Habitat from Pesticide Contamination published by the Xerces Society for Invertebrate Conservation or most recent guidance;

b. Herbicides marked with the U.S. Environmental Protection Agency's bee hazard icon shall be avoided;

c. Herbicides shall not be sprayed onto any native flowering plant, with special care to avoid special status plants and foraging species used by bumble bees.

d. Only herbicides with a short residual toxicity to bees shall be used. Pesticide toxicity shall be verified using UC Agriculture and Natural Resource's Bee Precaution Database, or equivalent current resource.

e. Targeted application methods shall be used instead of broadcast spraying whenever feasible.

f. All herbicide application must be conducted by a Licensed and Certified Pesticide Applicator, licensed by the California Department of Pesticide Regulation (CDPR), and shall be applied as directed by the manufacturer and all applicable federal, state, and local regulations.

15. Weed infestations shall be treated at least annually until eradication, suppression, or containment goals are met. For an infestation to be considered eradicated, no new seedlings or resprouts shall be observed for three (3) consecutive, normal rainfall years. Upon approval by the CPM, weed control efforts may be discontinued for that site.

16. Manual control shall include well-timed removal of weeds or their seed heads with hand tools. Removed seed heads and plants shall be disposed of in accordance with guidelines from the Kern County Agricultural Commissioner, if such guidelines are available. If no guidelines are available, all materials shall be sealed in bags and transported to a licensed green-waste or composting facility to prevent seed dispersal.

17. The IWMP shall include specific plans for any herbicide use based on known locations. The plan shall indicate where herbicides will be used, which herbicides will be used and specify techniques to be used to avoid drift or residual toxicity to native vegetation or special-status plants and wildlife. An updated herbicide work plan shall be developed based on the results of ongoing weed surveys

and submitted annually with the annual monitoring report and updated weed location maps.

18. Herbicides shall not be applied during or within 72 hours of predicted rain. Only water-safe herbicides shall be used in drainage areas or within channels (engineered or not) where they could run off into downstream areas. Herbicides shall not be applied when wind velocities exceed six (6) mph. All herbicide applications shall follow U.S. Environmental Protection Agency label instructions and shall be in accordance with federal, state, and local laws and regulations. Any herbicide proposed for usage must be approved in advance by the CPM and use shall not conflict with **BIO-13**.
19. The IWMP shall specify a reporting schedule, with no less than one report submitted annually, and shall define the contents of each report and reports shall be submitted by the project owner to document weed control activities, including treatment methods, locations, dates, monitoring results, and effectiveness of control measures.

Verification: The project owner shall submit the draft IWMP to the CPM for review and approval at least 60 days prior to start of any pre-construction site mobilization activities. The project owner shall provide the final IWMP to the CPM and CDFW at least 7 days prior to the start of any site mobilization. Any changes to the approved IWMP must be approved by the CPM. The annual report shall be submitted within 30 days of completion of the late season surveys.

BIO-10 **Invasive Species Management Plan.** The project owner shall develop and implement an Invasive Species Management Plan (ISMP). The ISMP shall be prepared in consultation with the Designated Biologist and shall include an education program (see **BIO-5**) to describe the risk that invasive species pose to native wildlife and the control methods required during pre-construction site mobilization, and during the construction, operation, and decommissioning phases of the project. The ISMP shall be submitted to the CPM for review and approval. The ISMP shall include the following:

1. **Invasive Species Education Program.** The program shall consist of a presentation by the Designated Biologist(s)or Biological Monitor(s)that includes a discussion of the invasive species currently present within the project site as well as those that may pose a threat to or have the potential to invade the project site. The discussion shall include a physical description of each species and information regarding their habitat preferences, local and statewide distribution, modes of dispersal, and ecological impacts. The program shall also include a discussion of best management practices (BMPs)

to be implemented at the project site to avoid the introduction and spread of invasive species into and out of the project site. The program shall provide interpretation for non-English speaking workers. The presentation may be recorded for later electronic viewing by new workers who begin work after the initial presentations. The program shall be repeated annually for the life of the project. Copies of program materials shall be maintained at the project site for workers to reference as needed. The program shall be included as part of the WEAP training and implemented, as required under **BIO-5**.

2. **Invasive Species.** The ISMP shall describe the best management practices (BMPs) that prevent the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. If decontamination is not done on site, transport contaminated equipment in sealed plastic bags and keep separate from clean gear. For locations known to be infested with invasive species, use dedicated equipment that is only used in infested waters and store this equipment separately. Prevention BMPs and guidelines for invasive plants are available California Invasive Plant Council's website at: https://www.cal-ipc.org/solutions/prevention/ and for invasive mussels and aquatic species are available at the Stop Aquatic Hitchhikers website: https://stopaquatichitchhikers.org/ or most recent guidance. These measures shall be adapted to conform when working in desert areas without connectivity to intermittent or perennial water sources.

3. **Inspection of Project Equipment.** Inspect all vehicles, tools, boots, and other project-related equipment and remove all visible soil or mud, plant materials, and animal remnants. All water must be drained from equipment prior to entering and exiting the project site and/or between each use in different waterbodies.

4. **Decontamination of Project Equipment.** All tools, waders and boots, and other equipment that will enter the project site and/or between each use in different waterbodies, shall be decontaminated to avoid the introduction and transfer of organisms between waterbodies. Decontamination methods and protocols shall be outlined in the ISMP and may include techniques to clean gear and equipment such as thorough drying, hot water treatment, freezing, or other scientifically supported practices. All equipment must be thoroughly cleaned prior to decontamination, with particular attention paid to areas where organisms may be trapped (e.g., seams, laces, net corners, etc.). Repeat decontamination shall be required if the

equipment/clothing is removed from the site, used within a different waterbody, and returned to the project site or different waterbody. Methods shall follow current best management practices as outlined in the CDFW Aquatic Invasive Species Decontamination Protocol or most current guidance. Decontamination measures can be adapted based on site-specific conditions when working in desert areas without connectivity to intermittent or perennial water sources. Decontamination measures shall ensure that terrestrial arthropods such as Argentine ants do not invade adjacent desert lands.

5. **Decontamination of Vehicles and Equipment.** Vehicles and other project-related equipment too large to immerse in a hot water bath shall be decontaminated by using effective methods designed to eliminate potential biological contaminants. This may include using pressurized hot water, flushing of internal systems, and thorough draining and drying. Methods shall follow current best management practices as outlined in the CDFW Aquatic Invasive Species Decontamination Protocol or most current guidance. Decontamination procedures can be adapted to conform when working in desert areas without connectivity to intermittent or perennial water sources. Decontamination measures shall ensure that terrestrial arthropods such as Argentine ants do not invade adjacent desert lands.

6. **Decontamination Sites.** The project owner shall identify a decontamination site approved by the CPM. The project owner shall ensure the decontamination of vehicles and other project-related gear and equipment is located in a designated location where runoff can be contained and not allowed to pass into CDFW-jurisdictional areas and other sensitive habitat. Preferably this will consist of an off-site location such as a construction yard or other approved vehicle washing location. Rinse water shall be disposed of at least 100 feet from any surface water.

7. **Notification of Invasive Species.** If an invasive species not previously known to occur within the project site is discovered during project activities the project owner or Designated Biologist shall notify the CPM and CDFW within 24-hours, or by Monday if during the weekend, or by the next business day if during a state or federal holiday. The report shall include photos and a completed Suspect Invasive Species Report (available online at: https://wildlife.ca.gov/Conservation/Invasives/Report). In addition, the project owner or Designated Biologist shall provide an email to the Invasive Species Program at: invasives@wildlife.ca.gov or current CDFW email for reporting. Notification may also be provided by

calling (866) 440-9530 or current CDFW phone number for reporting. Upon receiving guidance from the CPM, in coordination with CDFW, the project owner will take further action, as appropriate to the species.

Verification: The project owner shall submit the draft ISMP to the CPM for review and approval at least 45 days prior to the start of any site mobilization activities. The project owner shall provide the final ISMP to the CPM at least 7 days prior to start of any site mobilization. No site mobilization, ground disturbance, or construction activities may occur prior to approval of the final ISMP by the CPM.

BIO-11 **Special-Status Plant Avoidance Measures.** The Designated Biologist and/or Biological Monitor(s) shall conduct floristic pre-construction surveys for special-status plants. Surveys shall be conducted with the appropriate protocols approved by the CPM during the appropriate season in all suitable habitat within the project disturbance areas and access roads and within 100 feet of disturbance areas, where accessible. Surveys shall be conducted by qualified botanists or biologists approved by the CPM, pursuant to **BIO-1** and/or **BIO-3**.

The field surveys and reporting shall conform to current CDFW botanical field survey protocol (CDFW 2018) or more recent updates. With respect to areas potentially directly disturbed during the construction of the generation tie-line, protocol surveys conforming to the current CDFW botanical field survey protocol (CDFW 2018) are required for areas that have not previously been surveyed by the project owner to date. During each year of construction, and prior to site mobilization and ground disturbance, the project owner shall identify proposed survey areas to the CPM for review and approval prior to initiating annual botanical surveys. The survey plan shall identify proposed survey areas and the rationale for any areas not proposed for surveys. The survey plan shall include maps, at an approved scale, clearly defining each proposed survey area.

Any special-status plant species (including state and federally listed threatened or endangered species, candidates for listing, and all CRPR 1A, 1B, 2, 3, and 4 ranked species) detected shall be documented in the pre-construction survey reports. The results shall be submitted to CPM, CDFW, and USFWS (should federally listed plants be discovered) for review. The reports shall describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seeds or below-ground root stock (e.g., poor rainfall, disturbance, or wildfire). In some cases, follow-up surveys may be necessary to adequately evaluate impacts. Pre-construction field survey reports shall include maps, at an approved scale, showing locations of survey areas, reference populations, and special-status plants.

The results of these surveys will inform the implementation of appropriate avoidance and minimization measures, as outlined below:

1. **Avoidance.** Where feasible, any special status plant shall be protected by establishment of a minimum 50-foot non-disturbance buffer. The buffer area shall be clearly staked, flagged, and signed for avoidance prior to the beginning of site mobilization and maintained throughout the construction phase. The buffer zone shall be of sufficient size to prevent direct or indirect disturbance to the plants from site mobilization and construction activities, erosion, inundation, or dust.

   The final buffer distance shall be determined by a qualified biologist or botanist, approved under **BIO-1** and/or **BIO-3,** based upon the proposed use of the immediately adjacent areas and the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, water availability, edaphic physical and chemical characteristics).

   For tree or shrub species, the buffer shall be no less than twice the drip line (i.e., two times the distance from the trunk to the canopy edge) to protect and preserve the root systems. For herbaceous species, the buffer shall be a minimum of 50 feet from the outer edge of the occupied habitat or the individual.

   If a smaller buffer is necessary due to other site-specific constraints, the project owner, in coordination with the Designated Biologist or qualified botanist shall develop and implement site-specific protection measures, such as monitoring, to avoid the impacts to the species, if possible. The measure shall be subject to approval from the CPM, in consultation with CDFW. Such measures may include placing decking or pads above dormant species to prevent their loss and limit soil compaction.

2. **Compensatory Mitigation.** If avoidance is not feasible, the project owner shall mitigate impacts to any state or federally listed plants that are subject to disturbance from project activities. Should a State listed plant be subject to disturbance the project owner would be required to implement standard categories of mitigation applicable for take coverage through CESA which includes seed salvage, propagation, and the preservation of lands occupied by the species. The measures shall be subject to approval from the CPM, in consultation with CDFW. In addition, the project owner shall provide compensatory mitigation for CRPR 1 or 2 ranked species if project activities result in the loss of more than 10 percent of a defined occurrence due to direct or indirect impacts to soils, vegetation, or

water transport that could affect the species' viability. Western Joshua tree is addressed separately under **BIO-12.**

An occurrence, or local population, shall be defined as the number of individuals occurring on the project site or all plants within a 0.25-mile buffer.

- For perennial species, percent avoidance shall be based on population size or number of individuals avoided.
- For annuals, avoidance shall be based on occupied habitat, which includes habitat containing the species' micro-habitat preferences (e.g., such as "soil types and moist depressions").

Occupied habitat shall be calculated on both the project site and compensation lands as including each special status plant occurrence and a surrounding 100-foot buffer area to account for seed bank.

The project owner shall provide compensation lands at the following minimum ratios:

- 3:1 for any state or federally listed plants ~~and CRPR 1 or 2 ranked species~~
- 2:1 ratio for CRPR 1 or 2 ranked species

3. **Compensatory Mitigation by Acquisition:** The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands shall include the following:

   Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:

   b. **Occupied Habitat, No Habitat Threats.** The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable, or increasing (in size and reproduction).

   b. **Occupied Habitat, Habitat Threats.** Occupied compensation lands characterized by habitat threats may also be acquired if the population could be reasonably expected to recover with

habitat restoration efforts (e.g., OHV or grazing exclusion, or removal of invasive non-native plants) and is accompanied by a Habitat Enhancement/Restoration Plan.

c. **Unoccupied but Adjacent.** The project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat. This acquisition may include habitat restoration efforts where appropriate, particularly when these restoration efforts will benefit adjacent habitat that is occupied by the target species.

4. **Review and Approval of Compensation Lands Prior to Acquisition.** The project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above and must be approved by the CPM, in coordination with CDFW and/or USFWS.

5. **Compensation Lands Management Plan.** The project owner shall prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The objective of the management plan shall be to support and enhance the long-term viability of the target special-status plant occurrences. The Compensation Lands Management Plan shall be submitted for review and approval to the CPM, in coordination with the CDFW and/or USFWS.

6. **Integrating Special-Status Plant Mitigation with Other Mitigation lands.** If all or any portion of the acquired compensation lands for Crotch's bumble bee, burrowing owl, waters of the state, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation.

7. **Compensation Lands Acquisition Requirements.** The project owner shall comply with the following requirements relating to

acquisition of the compensation lands after the CPM, has approved the proposed compensation lands:

c. **Preliminary Report.** The project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM and CDFW. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. For conveyances to the State, approval may also be required from the California Department of General Services and the Wildlife Conservation Board.

d. **Title/Conveyance.** The project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM. Any transfer of a conservation easement or fee title shall be to CDFW if accepted by CDFW, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFW or another entity approved by the CPM. If an entity other than CDFW holds a conservation easement over the compensation lands, the CPM may require that CDFW or another entity approved by the CPM, in consultation with CDFW, be named a third-party beneficiary of the conservation easement. The project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.

c. **Initial Protection and Habitat Improvement.** The project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands.

   The habitat improvement funds may be held and expended by a qualified non-profit organization, CDFW or another public agency, provided that the entity is qualified to manage compensation lands (pursuant to California Government Code section 65965) and is authorized to participate in implementing the required activities on the compensation lands, upon approval of the CPM, in consultation with CDFW.

If CDFW accepts fee title to the compensation lands, the project owner shall provide the habitat improvement fund directly to CDFW or its designee.

Property Analysis Record. Upon identification of the compensation lands, the project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.

d. **Long-term Maintenance and Management Funding.** The project owner shall deposit a capital long-term maintenance and management fee in a dedicated interest bearing account held by governmental entity, special district, or nonprofit organization or other CPM approved entity, in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands.

The CPM, in consultation with CDFW, may designate another non-profit organization to hold the non-refundable, long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

If CDFW takes fee title to the compensation lands, CDFW shall determine whether it will hold the long-term management fee in the special deposit fund or designate another entity to manage the long-term maintenance and management fee under CDFW oversight.

In addition to the costs listed above under Items a-d, the project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to: title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to CDFW or an approved third party, escrow fees or costs, environmental contaminants clearance, and other site cleanup measures**.**

Mitigation Security. The project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of site mobilization and ground-disturbing activities.

Financial assurances shall be provided to the CPM, and copy to the CDFW, in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report.

Prior to submitting the evidence of Security, the project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security or approve of the security beneficiary to draw on the security, if the CPM determines the project owner has failed to comply with the requirements specified in this condition. Funds from the Security may solely be used for implementation of the requirements of this condition.

Use of the Security by the CPM or other approved entity does not relieve the project owner of its obligations under this condition if the Security is insufficient to fully cover required measures. Any unused portion of Security shall be returned to the project owner, in whole or in part, upon successful completion of the associated requirements in this condition.

8. **Monitoring.** Annual monitoring and documentation of salvaged plants shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation. Transplanted species may not be placed in areas subject to future land disturbance and must be protected by a conservation easement or restricted covenant that prohibits disturbance and ensures conservation of the site in perpetuity. Conservation lands would be acquired consistent with the specifications identified above under Section b. Title /Conveyance. Annual monitoring shall occur for a minimum of three years post-relocation to ensure the plants become established and are not at risk from weeds or other impacts, unless approved by the CPM. The results of annual monitoring shall be reported in an Annual Monitoring Report specific to salvaged of propagated plants for a minimum of three years. Additional monitoring may be necessary if determined upon review of the annual reports by the CPM that the success criteria are not met. Success criteria shall include maintaining habitat occupied by the impacted species at the identified ratios and number of plants for any occupied habitat affected by the project.

9. **Propagation and Relocation Strategy.** If salvage and relocation is not believed to be feasible for special-status plants, then the project owner shall consult with California Botanic Garden, or another qualified entity, to develop an appropriate propagation and relocation strategy, based on the life history of the species affected. The Special-Status Plant Propagation and Relocation Plan shall include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d) time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the plan's goals. The draft Special-Status Plant Propagation and Relocation Plan shall be submitted to the CPM for review and approval and to the CDFW for review and comment. The final plan approved by the CPM shall be submitted prior to any salvage or relocation.

Verification: The project owner shall submit the proposed annual survey plan 45 days prior to commencing the surveys to the CPM for review and approval. The project owner shall submit the results of each annual survey to the CPM for review and approval no more than 45 days after the completion of the surveys.

Should mitigation be required the project owner shall submit the Habitat Enhancement/Restoration Plan, Formal Acquisition Proposal, Compensation Lands Management Plan, Recent Preliminary Title Report, and Property Analysis Record (PAR) and Security to the CPM for review and approval and the CDFW/USFWS if applicable for review and comment no later than 45 days prior to construction. If plant propagation is proposed as mitigation the project owner shall submit the Special-Status Plant Propagation and Relocation Plan to the CPM for review and approval and the CDFW/USFWS if applicable for review and comment no later than 45 days prior to construction.

The project owner shall submit the Annual Monitoring Reports to the CPM for review and approval no more than 30 days after each reporting period.

BIO-12 Western Joshua Tree Avoidance, Minimization, and Mitigation Measures. To avoid, minimize, and mitigate impacts to western Joshua tree (WJT), the project owner shall ensure the following are implemented:

1. **Western Joshua Tree <u>Census,</u> Relocation Plan and Conservation Fund Fees.** The project owner shall submit a**<u>n updated Western Joshua Tree Census and</u>** final Western Joshua Tree Relocation Plan to the CPM for review and approval, and to CDFW for review and comment, prior to any site mobilization or

ground-disturbing activities within **50**~~200~~ feet of any WJT. **The updated census shall confirm the location of previously mapped WJTs, survey the portions of the project area that were not previously surveyed by the project owner due to site access constraints, and incorporate any new WJT stems or trunks that have arisen since completion of the prior surveys. The updated census shall include all WJT within the project area and a 50-foot buffer around the project area, including but not limited to, the generation tie-line, new access roads, laydown areas, staging areas, and other facilities. Additionally, the project owner shall update the Western Joshua Tree Relocation Plan if necessary to account for any newly identified or previously unmapped WJTs.** The **Western Joshua Tree Relocation Plan** shall include, at a minimum, the following:

a. Name and contact information for the project owner;

b. APNs for locations where trees are proposed for removal (with maps at an approved scale);

c. Name and qualifications of the desert native plant specialist overseeing relocation efforts;

d. Details of the locations where trees will be transplanted, including landowner name(s), address(es), APN(s), maps, approximate distance from original tree location, approximate difference in elevation from original tree location; site description including habitat and previous impacts;

e. A calculation of the number of trees to be relocated based on the CDFW Relocation Guidelines and Protocols (https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/WJTCA-ITP#apply) or most recent guidelines. The total number of relocated trees shall be a percentage of the number of trees lethally taken for the project and must at least meet or exceed the CDFW calculation for each size class depending on the method used (i.e., tree spade removal, bare root, or a combination of both).

f. A Tree Relocation Spreadsheet that includes a unique identifier (tree ID), size class, original location and recipient site locations (lat/long), relocation area name, anticipated removal and transplanting dates, the relocation method used, storage information (if applicable),

overall tree health assessment, photos, and any other pertinent information for each tree proposed for relocation;

g. A signed statement from the landowner from each relocation site granting the project owner permission to relocate trees to their land, provide access to implement the maintenance and monitoring measures, and allow staff to access the property to conduct compliance inspections (if trees will be relocated outside of the project area).

h. ~~In addition, the project owner shall conduct an updated Joshua Tree census prior to site mobilization for any areas that have not been disturbed such as the generation tie line, new access roads, laydown, staging, or other project components.~~ In addition, to submitting an updated Western Joshua Tree Census prior to site mobilization as specified in BIO-12, Item 1, the project owner shall conduct an updated Western Joshua Tree census prior to site mobilization for each phase of construction in any areas that were surveyed more than 12 months ago but have remained undisturbed, as confirmed in consultation with CDFW. This requirement applies to all project components that will be disturbed, including, but not limited to, the generation tie line, new access roads, laydown areas, staging areas, and other facilities. The project owner shall update the Western Joshua Tree Relocation Plan to account for any newly identified trees and provide this prior to site mobilization for each phase of the project. The survey methods and schedule shall be included in the Western Joshua Tree Relocation Plan.

Upon review and approval by the CPM of the Final Western Joshua Tree Relocation Plan, the CPM will provide an invoice for the required mitigation fee. Based on preliminary data submitted by the applicant, this is estimated to be $319,580.00 for Option 1 – Without Berm and $457,394.75 for the Option 2 - With Berm (see **Table 5.2-6**); however, the total fee shall be dependent on the final number of trees and class sizes that are authorized for take. The project owner shall submit the mitigation fee payment to the CDFW Region 4 office by check or money order with a copy of the invoice attached. No impacts to WJT shall be authorized until confirmation by CDFW that the mitigation fee has been received from the project owner. The check shall be submitted to the following address, or most current Region 4 office location:
California Department of Fish and Wildlife Region 4
1234 E. Shaw Avenue
Fresno, CA 93710

reg4assistant@wildlife.ca.gov
(559) 243 – 4005 ext. 151

2. **Western Joshua Tree Relocation Post-Relocation Reporting and Annual Reporting.** The project owner shall have a Designated Biologist approved by the CPM oversee all Western Joshua Tree Relocation activities. At the completion of relocation, the project owner shall submit a post-relocation report, consistent with current CDFW Western Joshua Tree Relocation Guidelines and Protocols (April 2025), no more than 30 days after relocation is completed and shall conduct annual monitoring of each relocated tree for a period of 3 years, or as required by current CDFW guidelines. An annual status report shall be submitted to the CPM for review and approval, and CDFW for review and comment. Each report shall include a health assessment of each relocated tree (with unique identifiers), a description of current habitat conditions (including any new disturbances), and representative photos and maps. The content of the reports shall be detailed in the Western Joshua Tree Relocation Plan.

3. **Notification of New Stem or Trunk: If a new WJT stem or trunk is identified prior to or** during construction **or operation**, once the project site has been fully cleared of the WJT identified in the census, if a new western Joshua tree stem or trunk arises from the ground, regardless of whether it germinates from seed, a trunk re-sprout occurs, or otherwise, project owner shall prepare a Notification of New Stem or Trunk and submit it to the CPM before conducting or resuming project activities that will impact any WJT individual that was not included in the census and included in the invoice, including any new WJT stem or trunk that arises from the ground (e.g., new sprouts or resprouts) [that are size class A or B]. The Notification of New Stem or Trunk shall include the following about any new WJT:

   - A unique identifier for each WJT (i.e., WJT ID);
   - GPS location for each WJT (latitude and longitude);
   - At least one color photo of each WJT identified;
   - Size class for each WJT (size class A is any WJT less than one meter in height, size class B is any WJT one meter or greater but less than five meters in height, size class C is any WJT greater than five meters in height);
   - Anticipated impact for each WJT (i.e., removal, relocation, trimming, or encroachment, or no impact);

- If the WJT will be encroached upon (individual will not be removed and project activities will take place within 15 meters of the base of the WJT) indicate the distance from the base where project activities will take place;
- A map showing the location of new WJT in relation to WJT for which take is authorized by the license.
- The project owner shall submit the Notification of New Stem or Trunk prior to conducting activities that may result in take of or impacts to the new stem or trunk (i.e., removal, trimming, relocation, or encroachment). After the CPM has confirmed the number and size class of individual WJT to be impacted, an invoice for the mitigation fees pursuant to Fish and Game Code section 1927.3, subdivisions (d)-(e) shall be issued to the project owner by the CPM as required under Item 1.
- The Notification of New Stem or Trunk and invoice shall be submitted to the CPM and serve as the basis for CPM authorization of additional take coverage for the new WJT individual(s) provided that the Notification of New Stem or Trunk the project owner submits is complete and mitigation fees are received prior to any impacts to any new WJT individuals identified in the Notification of New Stem or Trunk.

4. **WJT Stockpiles:** If dead and or removed WJT are stockpiled on site, they shall not be placed within 50-feet (approximately 15 meters) of a WJT that are being preserved on site, relocated on site, or encroached upon.

5. **Recurring Assessment:** The project owner shall conduct a Recurring Assessment of the project site to determine whether any new WJT individuals have emerged. The Recurring Assessments shall begin six months after the completion of ground-disturbing activities **for each phase of project construction** and be repeated annually for the duration of construction activities following the initial assessment, then every five years for the life of the project, unless approved by the CPM. If a new WJT is found, the project owner shall prepare and submit a Notification of New Stem or Trunk and submit it to the CPM before conducting project activities that will impact it. The project owner shall submit the results of the Recurring Assessment as part of Annual Status Report and during operation the results shall be submitted as part of the Annual Compliance Report.

6. **No-Work Buffers:** The project owner shall ensure no work is conducted within the no-work buffers for WJT that will be preserved

on site. Prior to beginning relocation, the project owner shall minimize work within the buffer of WJT that will be relocated to the maximum extent possible. After relocation, the project owner shall ensure no work is conducted within the no-work buffer for relocated WJT. The no-work buffers are as follows:

- 50 feet (approximately 15 meters) surrounding any WJT individual that is five meters or greater in height
- 25 feet (approximately 7.5 meters) surrounding any WJT individual is one meter or greater but less than 5 meters in height
- 10 feet (approximately 3 meters) surrounding any WJT individual less than one meter in height

  The project owner shall mark no-work buffers using fencing, stakes and ropes, or stakes and flagging of a different color than the color used to identify WJT individuals authorized to be taken. If WJT individuals occur in groups, the project owner may mark a single 50-foot (approximately 15-meter) buffer around the entire group, measured from the base of the trunk of the outer-most WJTs. Any adjustments to the buffer size shall be approved by the CPM, in coordination with CDFW. The project owner shall maintain the no-work buffer markings for the duration of project construction. After all construction activities are completed, the project owner must remove all materials used to mark no-work buffers.

7. **Trenching:** During storm events, the project owner shall not perform trenching activities within 50 feet (approximately 15 meters) of WJT preserved on site or relocated on site, as soils around the root zone of WJT may be more susceptible to erosion during such events. The project owner shall only perform trenching activities during periods of dry weather (with less than a 40 percent chance of rain), unless approved by the PM. Within at least 12 hours prior to the onset of predicted rain (40 percent chance of rain or more based on the National Weather Service) or immediately upon the onset of unpredicted rain, the project owner shall ensure that all trenching activities are ceased, all associated erosion control measures shall be in place, and all motorized equipment and fueling materials shall be removed from areas where runoff from these items can be reasonably foreseen to come into contact with WJT preserved on site, or relocated on site, or encroached upon. Trenching halted due to rain may resume when rain ceases. The project owner shall monitor the National Weather Service 72-hour forecast for the project site. Weather forecasts shall be documented and shall be provided upon request by the CPM.

Verification: The project owner shall submit the draft Western Joshua Tree Relocation Plan to the CPM review and approval, in consultation with CDFW, no less than 45 days prior to commencing any project activities that will impact western Joshua trees, including site mobilization and/or construction. The project owner shall submit the final Western Joshua Tree Relocation Plan and pay the WJTCA mitigation fees prior to any project activities that will impact western Joshua trees.

The annual status report for the relocated western Joshua tree shall be submitted to the CPM for review and approval, in consultation with CDFW, by January 31 of the following year.

If a new WJT stem or trunk is detected, the project owner shall submit a Notification of New Stem or Trunk to the CPM and to CDFW for review and comment prior to any project activities that may impact the new WJT. No impacts may occur until the CPM approves the notification and CDFW has received applicable mitigation fees.

BIO-13 **Crotch's Bumble Bee Impact Avoidance, Minimization, and Mitigation Measures for Take.** To avoid, minimize, and mitigate take of the Crotch's bumble bee, the project owner shall ensure the following are implemented during all phases of the project:

The Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys and monitoring for Crotch's bumble bee. Surveys shall be conducted by a qualified entomologist(s) or biologist(s) familiar with the life history and ecology of Crotch's bumble bee. All proposed surveyors shall be approved by the CPM, in coordination with the CDFW, pursuant to **BIO-1** and/or **BIO-3**.
Surveys shall cover all project work areas, including staging and parking areas, plus a 200-foot buffer, where accessible to account for ground borne vibration associated with controlled detonations, unless a smaller buffer is approved by the CPM. Surveys shall follow the non-invasive protocols established by CDFW in "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species" or more recent CDFW-approved methods, as available (CDFW 2023a).

1. **Crotch's Bumble Bee Mortality Reduction and Relocation Plan.** The project owner shall submit a Crotch's Bumble Bee Mortality Reduction and Relocation Plan to the CPM for review and approval, and to the CDFW for review and comment, prior to beginning any site mobilization or ground disturbing activities. The Crotch's Bumble Bee Mortality Reduction and Relocation Plan shall include a map of the project area indicating where Crotch's bumble bee are likely to occur; a detailed description of the survey methodology (survey details shall be in accordance with the Colony Active Period Season - Pre-Construction Survey described below

under Item 3); bumble bee identification and handling methods; measures that will be implemented to minimize impacts to foraging bees during ground disturbing and vegetation removal activities; measures to minimize impacts to overwintering bees during overwintering habitat removal; and measures to minimize impacts to bumble bee nests that are discovered during project activities. The plan shall identify nest relocation techniques and locations where Crotch's bumble bee nests will be relocated to; an assessment of the habitat and floristic resources found within the relocation sites; and a detailed description of the relocation process including method of removal, transport, and relocation.

The Mortality Reduction and Relocation Plan shall provide the name and contact information for a native bumble bee researcher who will assist and/or consult on techniques to relocate Crotch's bumble bee nests and the procedure for notification, collection, and salvage of Crotch's bumble bee carcasses. Only the CPM-approved Designated Biologist(s), or personnel following direction from and under the supervision of the CPM-approved Designated Biologist(s), are authorized to handle and transport Crotch's bumble bee individuals and Crotch's bumble bee nests for salvage. Handling of Crotch's bumble bee individuals and nests by any personnel not specifically authorized by the CPM is prohibited.

Upon written approval of the Crotch's Bumble Bee Mortality Reduction and Relocation Plan by the CPM, it shall be implemented and remain in effect for the duration of the project license. The plan may be updated by the project owner, in consultation with and subject to the approval of the CPM, to reflect best available science, address unanticipated issues associated with implementation, or update mitigation and conservation strategies. In such cases, the CPM will contact the project owner to discuss needs to update the plan. Any proposed changes to the Crotch's Bumble Bee Mortality Reduction and Relocation Plan shall be submitted, in writing, to the CPM for approval prior to the implementation of any proposed modifications.

2. **Overwintering Season Surveys (Pre-Construction and During Operation).** If initial ground disturbing construction activities in any given work area occurs during the overwintering season (November 1 through January 31), the CPM approved Designated Biologists(s) and/or Biological Monitor(s) shall conduct overwintering season surveys within areas of suitable habitat (i.e., where vegetation and floral resources occur) in each area planned for project activities no

more than 10 days in advance of vegetation removal or ground disturbance in that area of the project site.

If ground disturbing activities during operation occur within areas of suitable habitat (i.e., where vegetation and floral resources occur) during the overwintering season, the CPM-approved Designated Biologist(s) shall conduct overwintering season surveys throughout the project site in areas planned for ground disturbance no more than 10 days in advance of ground or vegetation removal activities, unless approved by the CPM.

Overwintering season surveys shall look for potential Crotch's bumble bee overwintering queens and hibernacula such as leaf litter, logs, and rodent burrows. If overwintering queens or other Crotch's bumble bee are found utilizing hibernacula during surveys, the project owner shall implement the Overwintering Site Buffer (see Item 5, below).

3. **Colony Active Period Season (Pre-Construction and Pre-Maintenance).** If initial ground disturbing construction activities, including site mobilization, in any given work area occur during the Colony Active Period (February 1 to September 30), the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall search for Crotch's bumble bee throughout the area planned for project activities in accordance with the Crotch's Bumble Bee Mortality Reduction and Relocation Plan.

   Survey efforts for each area shall include at least two visual surveys consisting of meandering transects occurring no more than 10 days prior to the start of ground and vegetation disturbing activities in that area. The CPM approved Designated Biologist(s) and/or Biological Monitor(s) shall conduct the surveys at least four days apart, with the second survey occurring within two days prior to starting ground and/or vegetation removal activities in that area. The survey duration shall be appropriate to the size of the area planned for project activities plus 50 feet based on the metric of a minimum of one person-hour of searching per three acres of suitable habitat.

   The CPM approved Designated Biologist(s) and/or Biological Monitor(s) shall conduct surveys between 7:00 AM and 6:00 PM (Pacific Time) on sunny days between 55-and 95-degrees Fahrenheit with sustained wind speeds measuring less than 10 miles per hour. Survey efforts are further detailed in the Crotch's Bumble Bee Mortality Reduction and Relocation Plan, and any variances to the Survey Protocol, including variances to survey temperatures or

timing, shall be submitted to the CPM for review and approval prior to implementation.

If ground disturbing activities occur during operation within areas of suitable habitat during the colony active period, the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall search for Crotch's bumble bee throughout the areas planned for ground disturbance in accordance with the Crotch's Bumble Bee Mortality Reduction and Relocation Plan.

If ground disturbing activities are halted for longer than three days within a work area supporting suitable habitat during the Colony Active Period defined as the Queen Flight Season (February 1 through March 31), the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall perform a minimum of one additional survey in the work area in accordance with the Crotch's Bumble Bee Mortality Reduction and Relocation Plan prior to reinitiating project activities in the work area.

If a Crotch's bumble bee nest is detected during project surveys or any project activities, the project owner shall implement the Crotch's Bumble Bee Mortality Reduction and Relocation Plan unless the nest can be avoided per the Crotch's Bumble Bee Nest Site Buffer measures (Item 6).

4. **Pre-Construction Survey and Observation Submittal (Construction, Operation, and Maintenance)**. The project owner shall provide the Colony Active Period Season - Pre-Construction Survey (Item 3) results or Overwintering Survey Results (to the CPM no more than ten days prior to initiating or resuming (Item 2) if initial disturbance not complete) project activities in each work area, unless alternate timing is approved by the CPM. The CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall notify the CPM if an overwintering individual and/or nest is observed within 100-feet of the project area during site mobilization, construction, or operation.

   Pre-construction surveys and observational submittals shall include a Keyhole Markup Language (KML) map, or KML-Zipped (KMZ) map, and Geographic Information System (GIS) shapefiles of all Crotch's bumble bee detections and/or nests found during survey efforts or during any incidental observations, and photographs of the individual or nest. The map shall include an outline of the project site, and any

distinct work area(s) surveyed within the project area, title, north arrow, scale bar, and legend.

5. **Overwintering Site Buffer (Construction, Operation, and Maintenance).** If any overwintering Crotch's bumble bee are found during focused overwintering surveys, during ground and/or vegetation disturbing activities, including site mobilization or construction activities, or during operation of the project, the project owner, in consultation with the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall immediately stop and prohibit all ground disturbing activities within 50 feet of the queen and/or hibernaculum. The project owner shall delineate the 50-foot buffer and notify all workers not to enter the environmentally sensitive area. This buffer may be adjusted with the approval of the CPM based on project activities and potential to disturb the nest.

   If an overwintering queen is exposed, the CPM approved Designated Biologist(s) shall implement the Crotch's Bumble Bee Mortality Reduction and Relocation Plan. The CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall record the queen's location with a GPS (including datum and horizontal accuracy in feet) and include photographs and a map of the queen's location as detailed in Item 4 (Pre-Construction Survey and Observation Submittal). Upon notice from the CPM, the project owner shall increase the size and modify the environmentally sensitive area buffer accordingly.

6. **Crotch's Bumble Bee Nest Site Buffer (Construction, Operation, and Maintenance).** If a Crotch's bumble bee nest is identified during Colony Active Period Season focused surveys, during ground and/or vegetation disturbing site mobilization or construction activities, or during operation of the project, the project owner shall ensure establishment of a 50-foot no disturbance buffer around each nest. Buffers shall remain in place until the nest has senesced, project activities are complete, or the nest has been relocated in accordance with the Crotch's Bumble Bee Mortality Reduction and Relocation Plan. This buffer may be adjusted with the approval of the CPM based on project activities and potential to disturb the nest.

   To determine if a nest has senesced, the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) shall monitor the nest for senescence in late summer and fall (September-October). Nest senescence can typically be denoted after the presence of reproductives (gynes and males) are observed. Nests shall be monitored for a minimum of one hour per day for three consecutive days during optimal weather conditions (i.e., from 7:00 AM to 6:00

PM, low wind, and low cloud cover conditions, etc.). If there has been no nest activity after the above conditions are met, or the nest has been relocated, the no disturbance buffer may be removed upon approval of the CPM. Survey efforts shall be further detailed in Crotch's Bumble Bee Mortality Reduction and Relocation Plan (Item 1).

7. **Daily Work Area Monitoring (Construction and Operation).** The CPM approved Designated Biologist(s) and/or Biological Monitor(s) shall be on-site during all initial ground disturbing site mobilization and/or construction activities in any given work area to visually monitor for Crotch's bumble bee and to detect flight activity. Visual sweeps of each work area shall occur prior to beginning daily project activities, and a minimum of three times throughout the workday, unless alternate timing is approved by the CPM.

   The CPM approved DBs(s) shall be on-site during all ground disturbing operation activities occurring within areas of suitable habitat. The Designated Biologist(s) and/or Biological Monitor(s) shall visually monitor for Crotch's bumble bee and to detect flight activity. Visual sweeps of each work area shall occur prior to beginning ground disturbing activities, and a minimum of three times throughout the workday for the duration of ground disturbing activities, unless alternate timing is approved by the CPM.

8. **Crotch's Bumble Bee Observations and Notification.** All workers shall inform the CPM-approved Designated Biologist(s) and/or Biological Monitor(s) if a Crotch's bumble bee nest is observed within or near a work area during implementation of any project activity, including ground or vegetation disturbing construction or operation activities. If a nest is observed all activities occurring within 50 feet of the nest shall cease and the project owner shall implement a 50-foot no disturbance buffer. If an overwintering Crotch's bumble bee nest cannot be avoided, then Item 1 (Crotch's Bumble Bee Mortality Reduction and Relocation Plan) shall be implemented.

9. **Weed Management Plan.** See condition **BIO-9** (Integrated Weed Management Plan).

10. **Pesticide and Herbicide Use.** The project owner shall not use substances such as herbicides, insecticides, or rodenticides except for the following conditions:

- Herbicides may be used if needed for noxious weed control or habitat restoration and enhancement.

- Pesticides (including insecticides) may only be applied post construction in indoor areas where contact with wildlife and foraging Crotch's bumble bee could not occur.

  Prior to any such use of herbicides or pesticides, the project owner shall consult with the CPM and may only use herbicides or pesticides upon the CPM's express written approval for each type of use. The project owner shall ensure that any herbicide use only occurs when Crotch's bumble bees are dormant, or when flowers within the application area are no longer in bloom, unless authorized by the CPM to control weeds.

11. **Document Crotch's Bumble Bee Observations.** Survey data shall be submitted to the CNDDB and shall include specifying the type of observation (e.g. individual bee or nest), type of vegetation cover, slope, aspect, GPS location, distance to foraging location (if known), and any other relevant conditions noted. Negative survey results shall also be reported to the CNDDB.

Verification: The project owner shall submit the draft Crotch's Bumble Bee Mortality Reduction and Relocation Plan no less than 45 days prior to commencing the surveys to the CPM for review and approval and to the CDFW for review and comment. The project owner shall provide the final plan to the CPM and CDFW at least 7 days prior to the start of any site mobilization.

The project owner shall submit the results of each survey to the CPM for review and approval and to the CDFW for review and comment no more than 45 days after the completion of the surveys.

The project owner shall submit information describing the findings of the bumble bee surveys and implementation of any avoidance measures in the Monthly Compliance Report (per **BIO-6**) and the Annual Compliance Report, during operation, to the CPM.

BIO-14 Habitat Management Land Acquisition for Crotch's Bumble Bee and Western Burrowing Owl

To mitigate for impacts to Crotch's bumble bee and western burrowing owl the project owner shall fulfill the following requirements:

The project owner shall purchase 843 acres of Crotch's bumble bee and western burrowing owl mitigation or conservation bank credits, at a location ~~within the Antelope Valley or Western Mojave Desert~~ approved in advance by the CPM, in coordination with CDFW, or shall provide for both the permanent protection and management of 843 acres of Habitat Management (HM) lands pursuant to Item 3 (Habitat Management Lands Acquisition and Protection) and the calculation and deposit of the management funds

pursuant to Item 5 (Endowment Fund). **The proposed mitigation lands shall also include Joshua Tree Woodland at the same 3:1 ratio should that community be impacted along the optional transmission line route.** The amount of mitigation required shall be calculated based on the project's final direct permanent and temporary loss of suitable Crotch's bumble bee and western burrowing owl habitat, **identified prior to ground disturbance** as approved by the CPM, in consultation with CDFW.

The purchase of mitigation or conservation bank credits or permanent protection and funding for perpetual management of HM lands must be complete before starting project activities, or within 18 months of the date of the site mobilization, if Security is provided pursuant to the Security (Item 11) below for all uncompleted obligations.

1. **Cost Estimates**. For the purposes of determining the Security amount, it is estimated the cost for the CPM or its contractors to complete acquisition, protection, and perpetual management of the HM lands is as follows:

a. Land acquisition costs for HM lands identified in the Item 3 (Habitat Management Lands Acquisition and Protection) below, estimated at $2,698.00/acre for 843 acres: $2,274,414.00. Land acquisition costs are estimated using local fair market current value per acre for lands with habitat values meeting mitigation requirements.

b. All other costs are necessary to review and acquire the land in fee title and record a conservation easement as described below in Item 3b. (Conservation Easement) below: $558,750.00.

c. Start-up costs for HM lands, including initial site protection and enhancement costs as described in the Item 3f (Start-up Activities) below, estimated at $344,549.00.

d. Interim management period funding as described in the Item 4 (Interim Management) (Initial and Capital)) below, estimated at $466,799.00.

e. Long-term management funding as described in the Item 5 (Endowment Fund) below, estimated at $2,918,823.00. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

f. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related

title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in the Item 10 (Reimburse CDFW), estimated at $13,600.00.

g. All costs associated with the CPM engaging an outside contractor to complete the mitigation tasks, including but not limited to acquisition, protection, and perpetual funding and management of the HM lands and restoration of temporarily disturbed habitat. These costs include but are not limited to the cost of issuing a request for proposals, transaction costs, contract administration costs, and costs associated with monitoring the contractor's work $45,479.00.

2. **Mitigation Bank Credits**. If the project owner elects to purchase credits to complete Crotch's bumble bee and western burrowing owl compensatory mitigation obligations, then project owner shall purchase 843 acres of Covered Species credits from a mitigation or conservation bank approved in advance by the CPM prior to initiating project activities, or no later than 18 months from the start of site mobilization, if Security is provided pursuant to Item 11 (Security) below. Prior to the purchase of credits, the project owner shall obtain CPM approval to ensure the mitigation or conservation bank is appropriate to compensate for the impacts of the project. The project owner shall submit to the CPM a copy of the Bill of Sale(s) and Payment Receipt prior to initiating site mobilization or within 18 months from start of site mobilization, if Security is provided.

3. **Habitat Management Lands Acquisition and Protection.** If the project owner elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the project owner shall:

a. Fee Title. Transfer fee title of the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, the CPM, in consultation with CDFW, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended.

b. Conservation Easement. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3.

If CDFW elects not to be named as the grantee for the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The project owner shall obtain written approval from the CPM, in coordination with CDFW, of any conservation easement before its execution or recordation. No conservation easement shall be approved by the CPM unless it complies with Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the "doctrine of merger" could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.

c. HM Lands Approval. The project owner shall obtain CPM written approval of the HM lands, in coordination with CDFW, before acquisition and/or transfer of the land by submitting, at least 90 days before acquisition and/or transfer of the HM lands, documentation identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the project's impacts on Crotch's bumble bee and western burrowing owl.

d. HM Lands Documentation. The project owner shall provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CPM for document list). All documents conveying HM lands and all conditions of title are subject to approval from the CPM; and if applicable, the Wildlife Conservation Board, and the Department of General Services.

e. Land Manager. Designate both an interim and long-term land manager, approved by the CPM, in consultation with CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. The land manager shall prepare a draft management plan for CPM review and approval, in consultation with CDFW, and written approval as part of the HM lands acquisition process. The project owner shall notify the CPM of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified. The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of the CPM, in consultation with CDFW.

f. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM

lands, once the HM lands have been approved by the CPM. Start-up activities include, at a minimum: (1) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (2) developing and transferring Geographic Information Systems (GIS) data if applicable; (3) establishing initial fencing; (4) conducting litter removal; (5) conducting initial habitat restoration or enhancement, if applicable; and (6) installing signage.

4. **Interim Management (Initial and Capital)**. Provide for the interim management of the HM lands. The project owner shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by the CPM, in consultation with CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management.

   The project owner shall either (1) provide Security to the CPM for the minimum of three years of interim management that the land owner, the project owner, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by the CPM to pay the land manager annually in advance, or (3) establish a short-term enhancement account with a CPM-approved entity for payment to the land manager.

5. **Endowment Fund.** If the project owner elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the project owner shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this condition of certification, the conservation easement, and the final management plan approved by the CPM. After obtaining CPM approval, in consultation with CDFW, of the HM lands, the project owner shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CPM-approved (in consultation with CDFW) fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs

include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the condition of certification, the conservation easement, and the management plan required by Item 3e (Land Manager). Endowment as used in the Certification shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this license, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, the project owner shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this license, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.

6. **Identify an Endowment Manager.** The Endowment shall be held by the Endowment Manager, which shall be either the CEC and/or CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.

a. The project owner shall submit to the CPM for review and approval, a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).

7. **Calculate the Endowment Funds Deposit.** After obtaining CPM written approval, in consultation with CDFW, of the HM lands, long-term management plan, and Endowment Manager, the project owner shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The project owner shall submit to the CPM, in consultation with CDFW, for review and

approval the results of the endowment assessment before transferring funds to the Endowment Manager.

a. Capitalization Rate and Fees. The project owner shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the endowment assessment and adjust for any additional administrative, periodic, or annual fees.

b. Endowment Buffers/Assumptions. The project owner shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:

c. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

d. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

e. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and the CPM, in consultation with CDFW.

8. **Transfer Long-term Endowment Funds.** The project owner shall transfer the long-term endowment funds to the Endowment Manager upon the CPM's approval of the Endowment Deposit Amount identified above.

9. **Management of the Endowment.** The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of Crotch's bumble bee and western burrowing owl but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this Certification, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

   Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of the

CPM in its sole discretion. The project owner shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.
Notwithstanding Probate Code sections 18501-18510, if the CPM, in consultation with CDFW, determines in its sole discretion that an expenditure needs to be made from the Endowment to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from the CPM. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from the CPM's decision to make such an expenditure.

10. **Reimburse CDFW.** The project owner shall reimburse CDFW for all reasonable costs incurred by CDFW related to transfer of the HM lands to CDFW, if applicable, including, but not limited to transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.

11. **Security:** The project owner may proceed with project activities only after the project owner has ensured the funding (Security) to complete any activity required by the Item 3 (Habitat Management Land Acquisition and Protection) that has not been completed before project activities begin. Permittee shall provide Security as follows:

a. Security Amount. The Security shall be in the amount of $6,622,414.00 or in the amount identified in the Item 1 (Cost Estimates) specific to the obligation that has not been completed. This amount is determined by the CPM and is based on cost estimates which are sufficient for the CEC or its contractors to complete land acquisition, property enhancement, startup costs, initial management, long-term management, and monitoring.

b. Security Form. The Security shall be in the form of an irrevocable letter of credit or another form of Security approved in advance in writing by the CPM, in consultation with CDFW.

c. Security Timeline. The Security shall be provided to the CPM before starting site mobilization.

d. Security Holder. The Security shall be held by the CPM or in a manner approved in advance in writing by the CPM.

e. Security Transmittal. The project owner shall transmit security to the CPM by way of an approved instrument such as an escrow agreement, irrevocable letter of credit, or other.

f. Security Drawing. The Security shall allow the CPM to draw on the principal sum if the CPM, in its sole discretion, determines that the project owner has failed to comply with this Condition of Certification.

g. Security Release. The Security (or any portion of the Security then remaining) shall be released to the project owner after the CPM has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by either:

i. Copy of Bill of Sale(s) and Payment Receipt(s) or Credit Transfer Agreement for the purchase of Crotch's bumble bee and/or western burrowing owl credits. OR

ii. Written documentation of the acquisition of the HM lands.

iii. Copies of all executed and recorded conservation easements.

iv. Written confirmation from the approved Endowment Manager of its receipt of the full Endowment.

12. **Additional Funding.** The CPM, in consultation with CDFW, may require the project owner to provide additional HM lands and additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the project owner does not complete these requirements within the specified timeframe.

Verification: The project owner shall provide verification that the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the date of start of site mobilization, even if a security is provided. The project owner shall provide the Draft Management Plan to the CPM for review and approval and to CDFW for review and comment no later than 60 days prior to construction. The project owner shall submit the Final Management Plan to the CPM and CDFW no later than 7 days prior to construction.

BIO-15 **Special-Status Reptile Avoidance and Minimization Measures.** The Designated Biologist(s) and/or Biological Monitor(s) shall conduct pre-construction surveys for special-status reptiles, including coast horned lizard and multiple species of legless lizards. Surveys shall be conducted by qualified biologists, approved by the CPM pursuant to **BIO-1** and **BIO-3**.

1. **Surveys.** Prior to ground-disturbing or vegetation removal activities, including during site mobilization and construction, within 100 feet of

habitat that has the potential to support legless or horned lizards, the Designated Biologist(s) and/or Biological Monitor(s) shall conduct surveys to detect this species. An annual survey plan shall be submitted to the CPM for review and approval.

One week prior to any ground disturbance and within 24 hours of beginning work in suitable habitat, the Designated Biologist and/or Biological Monitor(s) shall conduct surveys for these species, unless an alternate timeframe approved by CPM. Survey methods may include the placement of cover boards prior to the surveys and gently raking in soft friable soils, leaf litter, and debris piles, or other methods approved by the CPM.

The surveys shall be timed to coincide with the time of day and year when these species can be detected. Prior to conducting the surveys, the biologist shall locate the microhabitats for these species and determine a location to place cover boards or rake soils. A map of proposed survey areas shall be provided to the CPM for review and approval prior to initiating the surveys.

2. **If Detected.** If special-status reptiles are detected the Designated Biologist and/or Biological Monitor(s) shall remain in the work area throughout the duration of activities to ensure that impacts are avoided. If it is not possible to allow the animal to leave the work area on its own, the Designated Biologist(s) and/or Biological Monitor(s) shall relocate it to the nearest suitable habitat out of harm's way.

3. **Notification.** The project owner or Designated Biologist(s) shall notify the CPM and CDFW within 24-hours if either of these species are detected and include this information in Monthly Compliance Reports.

4. **Release Locations Criteria.** Prior to capturing or relocating either species, the most appropriate release location(s) shall be determined in adjacent habitat as close as possible to the capture point.

5. **Mortality or Serious Injury.** If the cumulative mortality or serious injury (i.e., compromising survival in the wild) across the entire project site during relocation activities exceeds more than three animals by species, the Designated Biologist(s) shall notify the CPM and CDFW within 24 hours and evaluate if a different method should be utilized or if additional measures are required.

6. **Reporting.** A report documenting survey results, including surveyor name(s), date(s) of survey, location (with maps), weather conditions,

and any observations or detections of sensitive reptiles shall be prepared and submitted to the CPM and CDFW. In addition, a monitoring report that includes the location, description, and duration of the activities, any observations or detections of sensitive reptiles found during the surveys or project activities, and any relocation efforts shall be provided during monthly and annual compliance reporting.

Verification: The project owner shall submit the proposed annual survey plan 45 days prior to commencing the surveys to the CPM for review and approval and to the CDFW for review and comment. The project owner shall provide the final plan to the CPM at least 10 days prior to the start of any site mobilization. The project owner shall submit the pre-construction survey reports to the CPM and CDFW within seven days of completing the surveys.

BIO-16 Desert Tortoise Avoidance Measures. To avoid impacts to desert tortoise, the Designated Biologist(s) and/or Biological Monitor(s) shall conduct pre-construction surveys prior to site mobilization and/or construction. Surveys shall be conducted by qualified biologists approved by the CPM, in coordination with CDFW and/or USFWS, pursuant to BIO-1 and BIO-3.

The Designated Biologist(s) shall also prepare and implement a Raven Management and Reporting Plan (Raven Plan), per Item 4, to minimize project-related predator subsidies and prevent any increases in raven numbers or activity within desert tortoise habitat during construction and operation phases.

1. **Surveys.** Prior to ground-disturbing or vegetation removal activities within 200 feet of the project site in suitable desert tortoise habitat the Designated Biologist(s) and/or Biological Monitor(s) shall conduct protocol surveys to detect this species on the WRESC project site and laydown areas if construction is not initiated prior to the 2026 spring survey season. Clearance surveys shall be conducted for all linear facilities prior to any ground disturbance. In addition, surveys shall be conducted one week prior to any ground disturbance and within 24 hours of beginning work in suitable habitat. Methods for clearance surveys and exclusion fence specifications shall be consistent with those described in the most recent *Desert Tortoise Field Manual* or more current guidance provided by CDFW and/or USFWS. Any potential burrows, sign, or tortoises shall be noted, recorded using a precision GPS device, and identified on project maps submitted to the CPM.

2. **Desert Tortoise Fencing.** The project owner shall install desert tortoise exclusion fencing around the project site, laydown, staging and parking areas. Exclusion fence specifications shall be approved

by the CPM and be consistent with those described in the most recent Desert Tortoise Field Manual or more current guidance provided by CDFW and USFWS. Fencing shall not be required to conduct work at or along the generation-tie line corridor.

After the completion of fencing installation, the Designated Biologist(s) and/or Biological Monitor(s) shall conduct 5 meter clearance sweeps of the project site prior to site mobilization. Follow-up surveys shall also be conducted within fourteen (14) days preceding additional construction after a gap in significant construction activities of 60 calendar days or more. Surveys shall include 100 percent of the area disturbed and a surrounding buffer of 200 feet. A map of proposed survey areas shall be provided to the CPM for review and approval, and the CDFW and USFWS, for review and comment prior to initiating the surveys. New clearance surveys shall be conducted if the desert tortoise fence is breached (e.g., large gaps, torn fencing, or cavities that could allow desert tortoises to enter the site) for more than 24 hours.

3. **If Desert Tortoise Detected.** If adult or juvenile desert tortoises or potentially active burrows are detected during the pre-clearance surveys the Designated Biologist and/or Biological Monitor(s) shall contact the CPM, CDFW, and USFWS immediately for guidance. No work shall occur within 200-feet of any potential burrow or desert tortoise pending coordination with the CPM, CDFW, and USFWS. Handling of desert tortoise shall not be allowed pending the completion of appropriate take authorization from the CEC, in coordination with CDFW, and USFWS, per Item 4.

4. **Supplemental Mitigation for Desert Tortoise.** Desert tortoise are not expected to occur within the project site. If a desert tortoise is detected during construction or operation, and an incidental take is necessary, take authorization shall only be pursued if it is determined by the CPM after consultation with CDFW and USFWS, that such take would not jeopardize the species persistence in the region. Upon confirmation, standard desert tortoise incidental take authorization conditions to minimize and fully mitigate impacts shall be required. These standard measures, approved by the CPM after consultation with CDFW and USFWS, and based on the specific facts of the situation, may include:

(1) Acquisition of permanent habitat compensation lands calculated on the importance of the habitat in the project area and standard USFWS and CDFW protocols;

(2) Tortoise burrow identification, monitoring, and possible burrow excavation by an authorized biologist;

(3) Establishment of exclusion or avoidance zones around active burrows or sightings;

(4) Worker environmental awareness training;

(5) Preparation and submittal of Monthly Compliance Reports; and

(6) Other measures as determined by the CPM, in consultation with CDFW and USFWS.

5. **Raven Management and Reporting Plan.** The Designated Biologist shall prepare and implement a Raven Management and Reporting Plan (Raven Plan) consistent with CDFW and USFWS raven management guidelines. The purpose of the Raven Plan shall be to minimize project-related predator subsidies (e.g. common ravens and coyotes) and prevent any increases in raven numbers or activity within desert tortoise habitat during construction and operation phases. The Plan shall address all project components and their potential effects on raven numbers and activity. The Raven Plan shall be reviewed and approved by CPM, in coordination with the CDFW and USFWS, prior to the start of site mobilization activities. The Raven Plan shall:

- Identify all potential project activities as well as structures, components, and other features that could provide predator subsidies or attractants. This includes but is not limited to: improperly managed food waste; road-killed animals; water storage facilities; pooled water from leaks, dust control, or wastewater; debris from brush and other vegetation clearing; as well perch or nest sites on project facilities and other infrastructure. As required by **BIO-7**, Item 18, all trash and food waste will be disposed of in secure, self-closing bins to prevent access by wildlife.

- Describe specific management practices to avoid or minimize conditions that might increase raven numbers and predatory activities. This includes the following:

  - Collect and dispose of animals killed on the site or project access roads to reduce food subsidies;

  - Water used for the project shall be applied to avoid puddling;

- Inactive common raven nests will be removed in accordance with USFWS guidelines. If re-nesting occurs, further measures will be coordinated with the CPM, in coordination with CDFW and USFWS; and

- Active nests will be reported to CPM, CDFW, and USFWS for consideration of egg-oiling or other authorized management measures.

- The Designated Biologist and/or Biological Monitor shall oversee implementation of the Raven Plan.

- The project owner shall contribute to the USFWS Regional Raven Management Program by making a one-time payment of $105 per acre of long-term or permanent project disturbance.

6. **Reporting.** A report documenting survey results, including surveyor name(s), date(s) of survey, location (with maps), weather conditions, and any observations or detections of desert tortoise or their sign will be prepared and submitted to the CPM, CDFW, and USFWS. In addition, a monitoring report that includes the location, description, and duration of the activities, any observations or detections of desert tortoise found during the surveys or project activities, and any relocation efforts will be provided during monthly and annual compliance reporting.

Verification: The project owner shall submit the proposed annual survey plan 45 days prior to commencing the surveys to the CPM for review and approval and to the CDFW and USFWS for review and comment. The project owner shall submit the pre-construction survey reports to the CPM, CDFW, and USFWS no more than 45 days after each survey effort has been completed. The project owner shall submit the receipt of payment to the USFWS Regional Raven Management Program 14 days prior to site mobilization. A report documenting survey results shall be prepared and submitted to the CPM, CDFW, and USFWS within 14 days of completing the surveys.

BIO-17 **Nesting Bird Avoidance and Minimization Measures.** The project owner shall prepare and implement a Nesting Bird Management Plan (NBMP) in coordination with the Designated Biologist and submit to the CPM for review and approval. The project owner shall submit the resumes of avian monitors under **BIO-1** and/or **BIO-3** prior to site mobilization and/or construction, if these activities are planned to occur during the breeding season. The NBMP shall describe methods to minimize potential project effects to nesting birds. Where scheduling allows the project owner shall clear or remove any vegetation, conduct site preparation in open or barren areas, or other project-related activities that may adversely affect breeding birds outside the nesting season.

Pre-construction nest surveys shall be conducted during the breeding season for local and migratory birds and will be timed to account for seasonal variation that occurs in the Mojave Desert (January 1 to August 31 for raptors and March 1 to August 31 for other species).

2. **Survey Requirements.** Surveys shall cover all potential nesting habitat and substrates within the project site and areas surrounding the project site within 500 feet of the project boundary, unless otherwise prohibited due to legal access or safety issues, upon approval from the CPM.

2. **Survey Schedules.** 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 site mobilization, brush clearing, ground disturbance, or construction activity. Surveys shall be repeated throughout site mobilization and construction phases to ensure that birds are not nesting on equipment or have moved into an area after the initial vegetation clearance has been completed.

3. **Nest and Avian Monitoring and Surveys During Construction.** Additional follow-up surveys shall be required if periods of construction inactivity exceed three weeks during January 1 through August 31 in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation.

4. **Nest Detection.** If active nests are detected during surveys, a no-disturbance buffer zone (protected area surrounding the nest) shall be established around each nest. Fencing and/or flagging will be used to delineate the no-activity zone. To minimize the potential to affect the reproductive success of the nesting pair, the extent of the no-activity zone shall be based several factors, including the distance of the activity to the nest, the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the species, and the dissimilarity of the proposed activity to background activities. The no-activities zone shall be large enough to avoid nest abandonment. Specific buffers shall also be proposed for any shrike caches should they be detected during construction.

   The NBMP shall define species-specific or guild-specific default buffers to be applied if an active nest is encountered. These buffer distances shall be reviewed and approved by the CPM, in consultation

with CDFW. The default buffers may be modified in the NBMP, with CPM 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 (or as described in conditions of certification specific for those species). Nest locations shall be mapped using GPS technology.

The plan shall include a table outlining default buffer distances for specific avian groups during construction, detailing the avian groups, species potentially nesting within the project limits and survey area, and corresponding horizontal buffer distances based on disturbance level (DL) in feet, unless alternative table format is approved by the CPM. Typical default buffer distances are 500 feet for most raptors and 250 feet for most passerines, as well as other species or guild-specific buffers.

Nest buffers shall be delineated using the following process:

- Upon discovery of an active nest the default buffer identified in the NBMP shall be applied

- The Designated Biologist(s) and/or Biological Monitor(s) with avian experience may adjust the buffer based on nest location characteristics (e.g. natural barriers), type and extent of project disturbance, and observed bird behavior. The nest buffer will be sufficiently large to avoid disturbance to the nesting birds and based on the default buffers included in the approved NBMP.

- Nest buffer reductions for special status species shall be requested in writing via email to the CPM for review and approval.

5. **Active Nest Protection.** If active nests are detected during the survey, the Designated Biologist(s) or Biological Monitor(s) 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(s) or Biological Monitor(s) 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. The Designated Biologist(s) or Biological Monitor(s) shall monitor the nest until it is determined that nestlings have fledged and dispersed or the nest is no longer active. Activities that might, in the opinion of the Designated Biologist(s) or Biological Monitor, disturb nesting activities (e.g., exposure to exhaust), shall be prohibited within the

buffer zone until such a determination is made. Any nest buffer reduction would require full time monitoring if reduced from the levels identified in the approved NBMP.

6. **NBMP Content.** The NBMP shall include:

a. definitions of default nest avoidance buffers for each species or group of species, depending on characteristics and conservation status for each species and the nature of planned project activities in the vicinity;

b. a notification procedure for buffer distance reductions should they become necessary;

c. a pre-construction survey protocol (surveys no longer than 3 days prior to starting work activity at any site);

d. a monitoring protocol, to be implemented until adjacent construction activities are completed or the nest is no longer active, including qualifications of monitors, monitoring schedule, and field methods, to ensure that any project-related effects to nesting birds shall be minimized;

e. a protocol for documenting and reporting any inadvertent contact with or effects to birds or nests;

f. Specify the responsibilities of construction workers and site personnel with regard to nests and nest issues and specify a direct communication protocol to the Biological Monitor and/or Designated Biologist;

g. Specify a procedure to be implemented following accidental disturbance of nests, including wildlife rehabilitation options; and

h. Specify a procedure for removal of inactive nests, including verification that the nest is inactive and a notification/approval process.

The NBMP will be applicable throughout the nesting season (from January 1 through August 31).

7. **Nest deterrents.** The NBMP shall describe any proposed measures or deterrents to prevent or reduce bird nesting activity on project equipment or facilities, such as buoys, visual or auditory hazing devices, bird repellents, securing of materials, and netting of materials, vehicles, and equipment.

It shall also include timing for installation of nest deterrents and field confirmation to prevent effects to any active nest; guidance for the contractor to install, maintain, and remove nest deterrents according to product specifications; and periodic monitoring of nest deterrents to ensure proper installation and functioning and prevent injury or entrapment of birds or other animals.

If an active nest is located on project facilities, materials or equipment, the project owner shall avoid disturbance or use of the facilities, materials or equipment (e.g., by red-tag) until the nest is no longer active.

8. **Nest Start Removal.** Prior to removing any suitable nesting habitat, preconstruction nesting bird surveys should inform as to where existing raptor nests, and other special status bird nests, occur throughout the project area. The locations of existing special status bird nests within the habitat removal footprint shall be recorded and mapped by a qualified biologist. Such nests shall be removed outside of the nesting bird season.

   Due to the potential for nest building during active construction, a biological monitor shall be employed for the duration of project construction to regularly inspect for nest building attempts that may occur on/within construction equipment and/or within an area of active construction disturbance.

   In the event nest building is detected, the biologist shall deter birds from nesting using non-invasive methods to modify the circum-stances. In the event a nest is built, and eggs are laid, the nest shall be considered active nest and shall be avoided. This may include placing a buffer around a piece of equipment or closing off a work area until the nest has fledged. This measure shall not be employed for state or federal special status species.

9. **Accidental Nest Disturbance.** The NBMP shall specify a procedure to be implemented following accidental disturbance of nests, including wildlife rehabilitation options. It also shall describe any proposed measures, and applicable circumstances, to prevent take of precocial young of ground-nesting birds such as killdeer or quail. The project owner shall identify an appropriate wildlife care facility before starting site mobilization. The location of the care facility shall be provided to the CPM prior to site mobilization. The project owner shall bear any costs associated with the care or treatment of project related injured birds. The project owner shall provide a letter report detailing the outcome of the care to the CPM.

10. **Reporting.** Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests (including helicopter traces), and any adjustments to buffer areas shall be updated and available to the CPM, weekly or other CPM-approved timeframe. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to the CPM.

    The draft NBMP shall include a proposed format for regular reporting (e.g., spreadsheet available online, tracking each nest). In addition, the NBMP shall specify the format and content of nest data to be provided in regular monitoring and compliance reports. At the end of each year's nest season, the project owner shall submit an annual NBMP report to the CPM and CDFW. Specific contents and format of the annual report will be reviewed and approved by the CPM in consultation with CDFW.

Verification: At the end of each year's nest season, the project owner shall submit an annual NBMP report to the CPM and CDFW no more than 30 days after the end of the nesting season. The project owner shall submit pre-construction survey reports to the CPM and CDFW no more than 30 days after each survey effort has been completed. The project owner shall provide a letter report detailing the outcome of the care of any injured birds or nest failures to the CPM and the CDFW within 14 days of the incident.

BIO-18 **Collision Avoidance and Minimization Measures.** The project owner shall submit proposed aerial marker installation plan that includes the types of markers to be used, their proposed installation locations, and a corresponding map. The project owner shall identify which section of the generation tie-line is located within 5 miles of active Swainson's hawk nests as determined by the Designated Biologist(s) and/or Biological Monitor (s). The project owner shall install bird flight diverters or other suitable aerial markers on the generation tie-line in all areas within 5-miles of Swainson's hawk nests, as confirmed by a qualified biologist, approved per **BIO-1** and/or **BIO-3**. All aerial markers and locations shall be approved by the CPM, in consultation with CDFW. The project owner shall ensure that all aerial markers remain in good condition and functional for the life of the project. Damaged or missing markers shall be repaired or replaced promptly upon discovery. Routine inspections shall be conducted at intervals approved by the CPM, in consultation with CDFW.

Verification: The project owner shall identify which section of the generation tie-line is located within 5 miles of active Swainson's hawk nests no less than 45 days prior to construction of the gen-tie line. The project owner shall submit a proposed aerial marker installation plan to the CPM and CDFW no less than 30 days prior to the installation of bird flight diverters or aerial markers. The project owner shall submit a report to the CPM and CDFW no more than 30 days after the placement of bird flight diverters or aerial markers

has been completed. Monitoring and maintenance of the markers shall be reported in the Annual Compliance Report during operation.

BIO-19 Burrowing Owl Impact Avoidance, Minimization, and Mitigation Measures for Take. The project owner shall implement the following measures to avoid, minimize and offset impacts to breeding and foraging burrowing owls during site mobilization, construction, operation, and decommissioning:

3. **Burrowing Owl Mortality Reduction Plan.** The project owner shall submit a Burrowing Owl Mortality Reduction Plan prepared the Designated Biologist(s) (s) for review and approval to the CPM, and CDFW for review and comment, prior to beginning any project activities including site mobilization, surveying, fencing, or ground disturbance. Burrow exclusion, burrow excavation, artificial burrow construction, and other relocation activities shall not proceed until this plan has been approved in writing by the CPM in coordination with the CDFW.

   The Burrowing Owl Mortality Reduction Plan shall include, but not be limited to detailed description of survey methodology; detailed burrow exclusion and excavation methods; project activities that may be performed within burrowing owl avoidance buffers; identification of a wildlife rehabilitation center or veterinary facility capable of and willing to treat injured burrowing owl or care for at-risk burrowing owl, burrowing owl eggs, and/or burrowing owl chicks; and procedure for collection and storage of BUOW carcasses. Only CPM approved Designated Biologist(s) (s), or personnel following directions from and under the supervision of the Designated Biologist(s), are authorized to handle and transport injured burrowing owl for treatment or impacted burrowing owl eggs for salvage. All other burrowing owl handling is prohibited.

   Once the Burrowing Owl Mortality Reduction Plan is approved in writing by the CPM, it shall be used for the duration of the project unless updated by request of the CPM to reflect best available science, or to update mitigation and conservation strategies. If any updates are required, the CPM will contact the project owner to discuss potential updates. Any proposed changes to the Burrowing Owl Mortality Reduction Plan shall be submitted, in writing, to the CPM for review and approval and the CDFW for review and comment in writing prior to the implementation of any proposed modifications.

2. **Burrowing Owl Burrow Replacement Plan.** The project owner shall replace each known burrowing owl burrow (as defined below under Burrow Avoidance) that cannot be avoided within the project area with an artificial burrow to compensate for the loss of important

shelter used by BUOW for protection, reproduction, and escape from predators. The project owner shall submit a Burrowing Owl Burrow Replacement Plan prepared by an approved Designated Biologist(s) to the CPM. Implementation of the Burrowing Owl Burrow Replacement Plan shall not proceed until this plan has been approved in writing by the CPM in coordination with the CDFW. The Burrowing Owl Burrow Replacement Plan shall include, but not be limited to: a discussion and map of potential artificial burrow replacement locations; description of the replacement burrow design and dimensions (e.g., depth and width of burrow, width of burrow entrance, orientation of burrow entrance, number and placement of entrances to natal burrows); artificial burrow installation methods; long-term artificial burrow protection and maintenance methods; and timing of BUOW burrow installation/construction.

Once the burrowing owl Burrow Replacement Plan is approved in writing by the CPM, it shall be used for the duration of the project unless it is updated by the CPM to reflect best available science, or to update mitigation and conservation strategies in which case the CPM will contact the project owner to discuss needed updates. If any updates are required, the CPM will contact the project owner to discuss potential updates. Any proposed changes to the Burrowing Owl Mortality Reduction Plan shall be submitted, in writing, to the CPM for review and approval and the CDFW for review and concurrence in writing prior to the implementation of any proposed modifications.

3. **Burrowing Owl Pre-Construction Nesting Surveys and Reporting.** The Designated Biologist and/or Biological Monitor shall conduct preconstruction surveys for burrowing owls to identify potential, known, and/or nesting burrowing owl burrows. A potential burrowing owl burrow is any subterranean hole three inches or larger for which no evidence is present to conclude that the burrow is being used or any past use by a burrowing owl; a known burrowing owl burrow is a burrow that shows evidence the burrow is being used, known to have been used, or past use by a burrowing owl, or an "atypical" burrow (e.g., a pipe, culvert, buckled concrete, etc.) showing signs of occupancy (e.g. burrowing owl presence, whitewash, pellets, prey remains, etc.); and a nesting burrowing owl burrow is used for nesting (e.g. known burrowing owl burrow indications of the presence of eggs, chicks, dependent young, and/or brooding or egg incubation. The survey area shall include the project disturbance area and surrounding 300-meter survey buffer, as accessible.

If surveys detect burrowing owls within 1,600 feet of proposed construction activities, the Designated Biologist shall provide to the CPM documentation indicating that non-disturbance buffer fencing has been installed no less than 10 days prior to the start of any project-related site disturbance activities. The documentation shall include information as specified in Items 4 and 5, or as otherwise requested by the CPM.

4. **Burrow Map.** The Designated Biologist(s)shall provide a Keyhole Markup Language (KMZ) map and GIS shapefiles to the CPM of all burrowing owl burrows found during the surveys conducted during the surveys required under Item 3 requirements (Burrowing Owl Pre-Construction Surveys and Reporting). The map shall show the details and locations of all burrowing owl sightings and potential, known, and nesting burrowing owl burrows as defined in the Burrowing Owl Burrow Avoidance section. The map shall include an outline of the project site, and any distinct work area(s) surveyed within the project area, title, north arrow, scale bar, and legend.

   If a territory or nest is confirmed during the surveys the project owner shall notify the CPM and CDFW within 48 hours. In coordination with the Designated Biologist(s), CPM and CDFW, a 1,600 foot line of sight disturbance-free buffer shall be established and demarcated by fencing or flagging and placed on project maps. This buffer may be adjusted as determined by a qualified avian biologist in coordination with the CPM and CDFW. Nest locations shall be mapped using GPS technology and provided the CPM.

5. **BUOW Burrow Avoidance.** The Designated Biologist, shall establish no-disturbance buffer zones around potential, known and nesting burrowing owl burrows according to the following guidelines:

   a. If a potential burrowing owl w (any subterranean hole three inches or larger for which no evidence is present to conclude that the burrow is being used or any past use by a burrowing owl) is discovered, the Designated Biologist shall establish a minimum 50-foot no-disturbance buffer around the burrow.

   b. If a known burrowing owl burrow (a burrow that is known to have been used or shows evidence of current or past use) or an "atypical" burrow (e.g., a pipe, culvert, buckled concrete, etc.) showing signs of occupancy (e.g. burrowing owl presence, whitewash, pellets, prey remains, etc.) is discovered, the Designated Biologist(s) shall establish a minimum no-disturbance buffer of at least 100 feet around the burrow. A no-disturbance buffer of at least 1,600 feet shall be established around known burrowing owl burrows currently

occupied by burrowing owl during the nesting season (typically February 1 to August 31 in this area). Nest buffer reductions are described below.

c. If a nesting burrowing owl burrow (e.g. known burrowing owl burrow with indications of the presence of eggs, chicks, dependent young, and/or brooding or egg incubation) is discovered within or immediately adjacent to the project site, the project owner and/or Designated Biologist shall notify the CPM and CDFW immediately through email. A no-disturbance buffer of at least 1,600 feet shall be established around the nest burrow. A no-disturbance buffer of at least 1,600 feet shall be established around known burrowing owl burrows currently occupied by burrowing owl during the nesting season (February 1 to August 31).

If burrowing owl burrows cannot be avoided as described above, then the project owner shall follow Item 6 (Burrowing Owl Burrow Blockage), Item 7 (Burrowing Owl Burrow Excavation), and Item 1 (Burrowing Owl Mortality Reduction Plan), as appropriate. If the approved Designated Biologist determines burrowing owl are visibly stressed by project activities or by workers in the vicinity after these no-disturbance buffers the Designated Biologist shall immediately increase the non-disturbance buffer to a distance where the visible stress is no longer observed. The increased no-disturbance buffers will be reviewed and approved by the CPM, in coordination with CDFW, based on their behavioral observations of the affected burrowing owl.

The buffers prescribed above shall not be reduced or otherwise modified without prior written approval from the CPM, in coordination with the CDFW. If the approved Designated Biologist(s) determines that specific project activities are not likely to affect the burrowing owl using known or nesting burrowing owl burrows due to the nature of the specific project activities, or due to objects or topography that might reduce potential noise disturbance and obstruct view of the project activities from the nest, then the CPM approved Designated Biologist(s) may email a written request to the CPM to reduce the buffer distance with documented observational data (Buffer Reduction Request). The CPM will review each Buffer Reduction Request on a case-by-case basis and provide a determination in response to each Buffer Reduction Request in writing. The CPM may request additional and ongoing biological monitoring prior to approving a Buffer Reduction Request.

6. **BUOW Burrow Blockage.** If the CPM has approved the blockage of a known burrowing owl burrow, the Designated Biologist shall block

rather than destroy any unoccupied known burrowing owl burrow located within the buffer distances limits prescribed in Item 5 (Burrowing Owl Burrow Avoidance), but outside the discrete work area(s) within the project area(s) where ground and vegetation disturbing project activities will be performed. Burrows (including burrows in natural substrate and in under man-made structures) may be blocked only immediately after the CPM-approved Designated Biologist(s) has conducted four consecutive 24-hour periods of monitoring with infrared camera and determined that burrowing owl is not currently present. Burrow blockage shall be done in a manner that prevents burrowing animals from digging back into the burrow. All blocked burrows shall be monitored by the approved Designated Biologist(s) and/or Biological Monitor(s) at least once every 48 hours while the blockage is in place to ensure that the exclusion material is still intact. If burrowing owl regains access to the burrow, the project owner or Designated Biologist shall contact the CPM immediately and obtain written guidance regarding how to proceed. All blocked burrows shall be unblocked within 48 hours of completion of construction activities within the prescribed buffer distance.

7. **Burrowing Owl Burrow Excavation.** The approved Designated Biologist(s), and/or Biological Monitor under direct supervision of the approved Designated Biologist(s), shall excavate known or potential burrows that exhibit signs of current or past burrowing owl use or characteristics suggestive of a burrowing owl burrow (including burrows in natural substrate and in/under man-made structures) that cannot be avoided per guidance in Item 5 (Burrowing Owl Burrow Avoidance), that are within the project site. Burrows to be destroyed shall be fully excavated, filled with dirt, and compacted to ensure that burrowing owl cannot reenter or use the burrow during the period that project activities occur in the project site.

d. Excavation of known burrowing owl burrows shall only occur after the approved Designated Biologist(s) has determined that burrowing owl is not currently present after 4 consecutive 24-hour periods of monitoring with infrared cameras. If the excavation process reveals evidence of current use by burrowing owl, then burrow excavation shall cease immediately, and camera monitoring as described above shall be conducted or resumed as applicable. burrowing owl burrows shall be carefully excavated with hand tools, or by mechanical means if a specific methodology is approved in writing by the CPM, until it is clear no individuals of burrowing owl are inside.

b. Potential burrowing owl burrows without any signs of burrowing owl use or characteristics suggesting it is a burrowing owl

burrow may be excavated under the direct supervision of the approved Designated Biologist(s) without prior camera monitoring.

c. Nesting burrowing owl burrows used for nesting shall not be excavated until biological and camera monitoring confirm that the chicks have fledged and are no longer dependent on the nest and then only after written concurrence from the CPM. An established burrowing owl burrow no-disturbance buffer may be removed once the burrow is collapsed and the burrowing owl (s) is/are no longer using the burrow.

8. **Burrowing Owl Injury.** If a burrowing owl is injured or found dead within the vicinity of the project area, project owner shall notify the CPM of the injury or mortality to the burrowing owl immediately by email. The Designated Biologist(s) shall follow the Burrowing Owl Mortality Reduction Plan to either immediately transport injured individuals to a CPM-approved wildlife rehabilitation center or veterinary facility or follow approved collection and storage procedures for deceased animals. The project owner shall bear any cost associated with care and recovery of any injured burrowing owl adults, nestling(s) or egg(s) and hacking (controlled release of captive reared young).

9. **Burrowing Owl Observations and Notification.** All workers shall be trained to identify burrowing owl and shall inform the approved Designated Biologist(s) if a burrowing owl is seen within or near the project area during implementation of any project activity. All work in the vicinity of the burrowing owl which could harm the individual, shall cease until the individual moves from the project area of its own accord or the approved Designated Biologist(s) passively encourages the individual to move out of harm's way, in compliance with the timing and methods identified in the CPM-approved Burrowing Owl Mortality Reduction Plan.

10. **Operation Activities Designated Biologist On-site.** The approved Designated Biologist(s) shall be onsite during all ground and vegetation disturbing activities. The approved Designated Biologist(s) shall be on-site during all non-emergency ground and vegetation disturbing project activities performed at night.

11. **Vehicle Parking (Site Mobilization, Construction and Operation).** During site mobilization, construction, operation, and maintenance activities or while implementing burrowing owl take minimization measures, the project owner shall not allow vehicles to park on top of known or potential burrowing owl burrows. Vehicles left overnight shall not be located within 50 feet of known burrowing

owl burrows. Workers shall inspect for burrowing owl under vehicles and equipment every time the vehicles and equipment are moved. If a burrowing owl is present, the worker shall wait for the burrowing owl to move unimpeded to a safe location. Alternatively, the approved Designated Biologist(s) shall be contacted to passively encourage the burrowing owl to move away from the vehicle or equipment, in compliance with the timing and methods identified in the Burrowing Owl Mortality Reduction Plan.

12. **Pipes and Materials Inspection (Site Mobilization, Construction, Operation).** The project owner shall ensure that all pipes or similar materials stockpiled or replaced in the project area are capped or otherwise enclosed at the ends to prevent entry by burrowing owl. The project owner shall ensure that any permanent pipes or similar materials or structures are left open where burrowing owl or other species may enter them and become trapped. The approved Designated Biologist shall thoroughly inspect all such materials for burrowing owl, before they are moved, buried, or capped. If a burrowing owl is discovered inside such material, that section of material shall not be moved until the animal has escaped of its own accord. Alternatively, the approved Designated Biologist may passively encourage the burrowing owl. to move away from the pipes, culverts, or similar structures, in compliance with the timing and methods identified in the Burrowing Owl Mortality Reduction Plan.

13. **Ground and Vegetation Disturbing (Site Mobilization, Construction, and Operation).** Burrowing Owl Pre-Construction Surveys and Reporting (Item 3) shall be implemented within 30 calendar days prior to commencing ground or vegetation disturbing activities during operation in each distinct work area(s) within the project site. If the approved DB identifies any potential, known, or nesting BUOW burrows, the burrow(s) shall be monitored following the Burrowing Owl Burrow Blockage (Item 6) and Burrowing Owl Burrow Excavation (Item 7) as applicable, unless avoided per the Burrowing Owl Burrow Avoidance requirements (Item 5).

14. **Burrowing Owl Observations (Operation).** During operational activities within the project site, all workers shall inform the approved Designated Biologist if a burrowing owl is observed within or near the project area. All work in the vicinity of the burrowing owl, which could injure or kill the animal, shall cease immediately until the burrowing owl moves from the project area of its own accord or the approved DB passively encourages the individual to move out of harm's way, in compliance with the timing and methods identified in the approved Burrowing Owl Mortality Reduction Plan.

15. **Burrowing Owl Injury (Operation).** If a burrowing owl is injured or found dead within the vicinity of the project area, the project owner shall notify the CPM of the injury or mortality to the burrowing owl immediately. The approved Designated Biologist shall follow the approved Burrowing Owl Mortality Reduction Plan to either immediately transport injured individuals to a CDFW-approved wildlife rehabilitation center or veterinary facility or follow approved collection and storage procedures for deceased animals. The project owner shall bear any cost associated with care and recovery of any injured burrowing owl adults, nestling(s) or egg(s) and hacking (controlled release of captive reared young).

Verification: The Designated Biologist shall provide the preconstruction survey results to the CPM within 14 days of the completion of the survey. If surveys detect burrowing owls within 1,600 feet of proposed construction activities, the Designated Biologist shall provide the CPM documentation indicating that a non-disturbance buffer has been installed no less than 10 days prior to the start of any project-related site disturbance activities. The documentation shall include information as specified in Items 4 and 5, or as otherwise requested by the CPM.

If pre-construction surveys detect burrowing owls or active burrowing owl burrows within the project disturbance area, the project owner shall provide to the CPM a Burrowing Owl Mortality Reduction Plan prior to the start of activities (the measures described in the plan shall be incorporated into the BRMIMP and implemented.) The plan shall be for review and comment by the CPM and shall be finalized no less than 30 days prior to commencing site mobilization.

The project owner shall submit the Burrowing Owl Mortality Reduction Plan and Burrow Replacement Plan to the CPM for review and comment at least 30 days prior to initiation of site mobilization. Within 30 days of the conclusion of the construction period, the project owner shall submit a final Burrowing Owl Mitigation Implementation Report detailing location of all burrowing owl observed, take measures implemented, and their effectiveness.

During operations, the project owner shall include in the Annual Compliance Report an accounting of all burrowing owl documented on site, including copies of the Designated Biologist and/or Biological Monitor's field notes, any buffer zones erected, maps, additional avoidance and minimization measures implemented, and their perceived effectiveness.

BIO-20 Swainson's Hawk Avoidance and Minimization Measures. The DB and/or Biological Monitor(s) shall conduct protocol surveys for Swainson's hawks and avoid all occupied nests. Survey schedule and requirements shall be as identified below unless otherwise authorized by the CPM in consultation with CDFW.

1. **Survey Requirements.** The Designated Biologist shall provide the resumes of proposed Swainson's hawks surveyors to the CPM for approval and the CDFW and USFWS for concurrence prior to

conducting surveys, pursuant to **BIO-1** and/or **BIO-3**. Prior to conducting the surveys, the project owner or Designated Biologist shall provide a map identifying all potential nesting habitat in or within 0.5-miles of proposed disturbance areas during construction to the CPM and CDFW. One round of protocol surveys will be completed within 5-miles of the generation tie-line corridor, unless otherwise prohibited due to legal access or safety issues, to assist in the location where aerial markers or bid flight diverters shall be installed. Preconstruction surveys Swainson's hawks shall occur annually during the construction phase of the project in all areas supporting suitable roosting or breeding habitat within 0.5 miles of project disturbance areas including but not limited to Whirlwind switching station, WRESC site, access roads, lay down areas, and generation tie-line alignment where active construction is proposed.

Surveys will be designed and carried out by a qualified biologist with experience in the natural history and nesting behavior of Swainson's hawks. The survey periods will follow a specified schedule: Period I occurs from 1 January to 31 March, Period II occurs from 1 April to 30 April, Period III occurs from 1 May to 30 May, and Period IV occurs from 1 June to 15 July Surveys are not recommended during Period IV because identification is difficult, as the adults tend to remain within the nest for longer periods of time. No fewer than three surveys per period in at least two survey periods shall be completed immediately prior to the start of project construction, unless approved by the CPM, in coordination with CDFW.

2. **Nesting Season Inventory Data.** At a minimum, data collected during the nesting season surveys shall include the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, number observed; nesting chronology; number of young at each visit; photographs; and characterization of the habitat in which the nest is placed.

3. **Nest Detection.** If an active or occupied nest is confirmed during the surveys within 0.5 miles of the project site or gen-tie line the project owner shall notify the CPM and CDFW within 48 hours. In coordination with the CPM and CDFW a 0.5-mile line of sight disturbance-free buffer shall be established and demarcated by the DB with fencing or flagging and placed on project maps. This buffer may be adjusted as determined by a qualified avian biologist, approved pursuant to **BIO-1** and/or **BIO-3** in coordination with the CPM and CDFW. This buffer shall remain in place until the Designated Biologist has verified that the nest is no longer active or occupied. Nest locations shall be mapped using GPS technology and provided to the CPM.

4. **Active Nest Protection.** If surveys detect nesting Swainson's hawks, a 0.5 mile no-disturbance buffer zone shall be implemented around the nests until the end of the breeding season, or a qualified biologist determines that the nest is no longer active. Alternate buffer zones may be proposed if there is compelling ecological justification for the reduction with the approval of the CPM, in coordination with the CDFW. Alternative buffers must be approved in writing by the CPM, in consultation with CDFW. The Designated Biologist or Biological Monitor shall monitor the nest until it is determined that nestlings have fledged and dispersed or the nest is no longer active. Activities that might, in the opinion of the Designated Biologist(s)or Biological Monitor(s), disturb nesting activities (e.g., exposure to exhaust), shall be prohibited within the buffer zone until such a determination is made.

5. **Accidental Nest Disturbance.** The project owner or Designated Biologist shall notify the CPM and CDFW within 48 hours if an active nest fails and if the failure was project related or predation.

6. **Reporting.** The Designated Biologist shall prepare a Swainson's Hawk Survey Report and submit the document to the CPM for review and approval and the CDFW for review and comment. Throughout the construction phase of the project, nest locations, project activities in the vicinity of nests, and any adjustments to buffer areas shall be updated and available to the CPM. Nest data and, if applicable, nest activity monitoring results and any adaptive management actions taken, shall be provided to CPM and CDFW in monitoring reports submitted as part of the Monthly Compliance Report, as data becomes available and if specific nest monitoring or any adaptive management actions are taken, and summarized in annual monitoring reports. All buffer reduction notifications and prompt notifications of nest-related non-compliance and corrective actions will be made via email to the CPM and CDFW. At the end of each year's nest season, the project owner shall submit an annual monitoring report to the CPM and CDFW. Specific contents and format of the annual report shall be submitted to the CPM for review and approval, in consultation with CDFW.

Verification: The project owner shall submit the resumes of the proposed Swainson's hawks biologists and avian monitors no less than 45 days prior to conducting the surveys and or site mobilization whichever comes first. The project owner shall submit pre-construction survey reports to the CPM and CDFW no more than 30 days after each survey effort has been completed. The project owner shall provide a letter report detailing the outcome of any nest failures to the CPM and the CDFW within 14 days of the incident.

BIO-21 Small Mammal Avoidance and Minimization Measures. The Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys to identify areas that support dense concentrations of small mammal burrows that could be utilized by Tulare grasshopper mouse, Tehachapi pocket mouse, and San Joaquin pocket mouse. Surveys shall be conducted by qualified biologists approved by the CPM, in coordination with CDFW, pursuant to **BIO-1** and/or **BIO-3**.

1. **Surveys.** Prior to any site mobilization, including ground-disturbing or vegetation removal activities, that will occur in suitable habitat during the general breeding season for pocket mice (May 1 through July 15) the Designated Biologist and/or Biological Monitor(s) shall conduct focused surveys to identify dense concentrations of potential burrows for pocket mice.

   Surveys shall encompass work areas and a 50-feet buffer, unless approved by the CPM or otherwise prohibited due to legal access or safety issues. Any areas supporting dense concentrations of potential burrows for pocket mice shall be recorded using a precision GPS unit and included on maps.

   In addition, prior to site mobilization on the WRESC project site and laydown areas a clearance survey conducted in the proposed work areas shall be conducted by the Designated Biologist and/or Biological Monitor(s) to identify any new or modified dense small mammal burrow concentrations that may have not been identified during pre-construction surveys.

2. **Salvage of Pocket Mice.** During initial grading the Designated Biologist(s) and/or Biological Monitor(s) shall make every effort to salvage small mammals such as pocket mice that may be displaced during initial ground disturbance. Mice will be collected, stored in a container that provides refuge, then relocated to adjacent habitat and placed under a shrub.

3. **Mortality or Serious Injury of Small Mammals.** If mortality or serious injury (i.e., compromising survival in the wild) occurs to any special status small mammal (e.g., Tulare pocket mouse, Tehachapi pocket mouse, San Joaquin pocket mouse, ringtail, etc.), the project owner or Designated Biologist shall immediately contact the CPM to evaluate if additional measures are required, in coordination with CDFW.

4. **Reporting.** A report documenting survey results, including surveyor name(s), date(s) of survey, location (with maps), weather conditions, and any records of any areas supporting densely concentrated small mammal burrows or observations of special-status small mammals

will be prepared and submitted to the CPM and CDFW. In addition, a monitoring report that includes the location, description, and duration of the activities, any observations or detections of these species found during the surveys or project activities, any salvage efforts that were implemented, and any mortalities or injuries that were reported will be provided during monthly and annual compliance reporting.

Verification: The project owner shall submit the pre-construction survey reports to the CPM and the CDFW no more than 30 days after each survey effort has been completed. Monitoring reports shall be submitted in the Monthly Compliance Report during construction and Annual Compliance Report, as needed, during operation.

BIO-22 **American Badger, Desert Kit Fox, and Ringtail Avoidance and Minimization Measures.** The Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys for American badger, desert kit fox, and ringtail. Surveys shall be conducted by qualified biologists approved by the CPM, in coordination with CDFW, pursuant to **BIO-1** and/or **BIO-3**. These measures shall be included in the BRMIMP and implemented.

1. **Surveys.** Pre-construction surveys for American badger, desert kit fox, and ringtail shall be conducted within a 500-foot radius of all project disturbance areas, where legal access is granted, to detect individuals and dens. Surveys shall be conducted no more than 14 days prior to the start of project activities; however the project owner may elect to conduct additional surveys to map and detect potential dens that occur on or near disturbance areas.

   Surveys shall be conducted using 20 meter (65-feet) spaced transects or less depending on topography to ensure 100 percent visual coverage of the survey area, unless approved by the CPM. Surveys shall be conducted during favorable weather conditions, avoiding periods of heavy wind or rain, fog, or other climate conditions that could potentially affect the ability of the surveyors to detect dens. All potential dens shall be examined for evidence of use by American badger, desert kit fox, or ringtail (i.e., scat, tracks, or fur). Any dens or den complexes identified during the surveys shall be classified as inactive, potentially active, or active.

   The Designated Biologist and/or Biological Monitor(s) shall monitor all potentially active den entrances within 500-feet of project disturbance areas with infrared cameras for five consecutive days to determine den occupancy. Occupancy shall be determined through camera footage and/or by checking the apron of the den entrance(s) for tracks in loose dirt and by using a tracking medium (e.g. diatomaceous earth). If desert kit fox or ringtail are detected during surveys, the project owner shall notify the CPM and CDFW immediately.

2. **If Dens are Detected.** If a desert kit fox or ringtail den is determined to be active, it shall be avoided by a minimum of 500 feet during the pupping season (January 1 through August 31 for desert kit fox; May 1 through August 31 for ringtail) and by a minimum of 200 feet outside of the pupping season (September 1 through December 31 for desert kit fox; September 1 through April 30 for ringtail). If an American badger den is determined to by active, it shall be avoided by a minimum of 250 feet during the pupping season (March 1 through August 31) and by a minimum of 100 feet during the non-pupping season (September 1 through February 28). Avoidance buffers shall be established by the Designated Biologist using staking, flagging, or other conspicuous materials. No project activities will be permitted within the avoidance buffers. The Designated Biologist may modify the avoidance buffer distances based on the location of the den, specific site conditions, and nature of proposed work activities, with prior written approval from the CPM in coordination with CDFW. The avoidance buffer shall remain in place until the Designated Biologist(s) confirms that the young have left the den or the den has been naturally abandoned or failed.

3. **Passive Relocation.** No passive relocation shall be allowed at any time if active ringtail dens are identified and confirmed during surveys or biological monitoring. If confirmed active American badger or desert kit fox dens cannot be avoided, the project owner shall submit an American Badger and Desert Kit Fox Eviction Plan to the CPM for review and approval and the CDFW for review and comment. The American Badger and Desert Kit Fox Eviction Plan shall address proposed eviction activities outside the pupping season, and shall include, at a minimum, the following:

- Methods and materials used for construction and maintenance of one-way eviction doors;
- Use of continuous camera monitoring of dens for at least five consecutive days to confirm that no American badger or desert kit fox individuals are present and to ensure none are trapped during eviction;
- Specific timing of eviction activities;
- Design, materials, and methods used for construction and maintenance of artificial burrows and/or identification of location and discussion of preexisting, suitable, and unoccupied natural dens;
- Methods of den collapse; and

- Details regarding a "protect-in-place" option (i.e., evict but no collapse).

  Passive relocation during the pupping season shall not be authorized. Passive relocation outside the pupping season shall be evaluated on a case-by-case basis by the CPM, in consultation with CDFW.

4. **Notification of Detection.** The project owner or Designated Biologist shall notify the CPM as well as CDFW within 24-hours if an American badger or desert kit fox, or any other special status mammal is detected during the surveys or during routine monitoring. The report shall include the number of animals detected, photos, and the location of the detection. Upon receiving notification, the CPM and CDFW may provide guidance for further action as appropriate to the species.

5. **Monitoring.** The Designated Biologist and/or Biological Monitor(s) shall remain onsite throughout the duration of any project activities that are conducted within 300 feet of the edge of the avoidance buffer. The biologist will have the authority to halt work, if it is determined that the animals are exhibiting increased levels of distress (e.g., displaying defensive behavior, pacing, leaving the den).

6. **Report Mortalities and Serious Injuries Immediately.** If any special status mammal species are found dead or injured during any project-related activities, the project owner or Designated Biologist shall immediately notify the CPM and CDFW and shall provide written notification to CPM and CDFW within 48 hours. The CPM and CDFW shall review the activities resulting in mortality and determine if additional protective measures are required.

7. **Reporting.** A report documenting survey results, including surveyor name(s), date(s) of survey, location (with maps), weather conditions, and any observations or detections of sensitive mammals or their dens will be prepared and submitted to the CPM and CDFW. In addition, a monitoring report that includes the location, description, and duration of the activities, any observations or detections of these species found during the surveys or project activities will be provided during monthly, quarterly, and annual compliance reporting.

Verification: The project owner shall submit the pre-construction survey reports to the CPM and CDFW no more than 30 days after each survey effort has been completed. If required, the project owner shall submit a draft American Badger and Desert Kit Fox Eviction Plan to the CPM for review and approval and CDFW for review and comment. As final plan shall be submitted no less than 7 days prior to implementation.

BIO-23 Mohave Ground Squirrel Avoidance and Minimization Measures. The Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys for Mohave ground squirrel prior to the start of any site mobilization or other ground-disturbing activities, if those activities begin after or concurrently with the 2026 survey season for Mohave ground squirrel. Surveys shall be conducted by qualified biologists approved by the CPM, in coordination with CDFW, pursuant to **BIO-1** and/or **BIO-3**. These measures shall be included in the BRMIMP and implemented.

1. **Pre-Construction Surveys.** To confirm non-occupancy status of the project site, the Designated Biologist(s) and/or Biological Monitor(s) shall conduct camera or live trapping prior to site mobilization, including any ground-disturbing or vegetation removal activities that will occur in suitable habitat. Surveys shall follow protocols approved by the CPM in coordination with CDFW. The Designated Biologist and/or Biological Monitor(s) shall conduct trapping for the WRESC site, P1 north and south, P2 and the VH property or a representative site mutually agreed upon by the CPM, in coordination with the CDFW. Surveys shall encompass work areas and a 50-foot buffer, unless approved by the CPM. Any observations shall be recorded using a precision GPS unit and included on maps submitted to the CPM.
2. **No Detection.** If surveys are negative, the site will be considered not occupied and construction may proceed upon approval by the CPM. No additional surveys would be required for the duration of construction unless a period of one year or more passes prior to any ground-disturbing activities. Additional follow-up surveys shall be required if periods of construction inactivity exceeds more than one year in any given area,
3. **If Detected.** If Mohave ground squirrels are detected a 300-foot non-disturbance buffer shall be established around the detection site where no construction activities may occur. This non-disturbance buffer shall remain in place until the CPM and CDFW have been consulted and have provided direction on appropriate next steps.
4. **Notification of Detection.** The project owner or Designated Biologist shall notify the CPM and CDFW within 24 hours of any Mohave ground squirrel detected during the surveys. The report shall include the number of animals detected, photographs (if available), and the location of the detection. Upon receiving

notification, the CPM and CDFW will provide guidance for further action as appropriate to the species.

5. **Supplemental Mitigation for Mohave Ground Squirrel**

   If Mohave ground squirrels are detected and an incidental take authorization is necessary and if the issuance of take authorization will not jeopardize the species persistence in the region, standard Mohave Ground Squirrel incidental take permit conditions to minimize and fully mitigate impacts shall be required as approved by the CPM after consultation with CDFW. These standard measures, as refined by the CPM based on the facts of the situation, may include:

   (1) Acquisition of permanent habitat compensation lands, calculated on the importance of the habitat in the project area and standard CDFW protocols;

   (2) Burrow excavation and avoidance measures;

   (3) Establishment of avoidance zones;

   (4) Worker environmental awareness training;

   (5) Monthly Compliance Reports; and

   (6) Any other measures as determined by the CPM in consultation with CDFW.

6. **Reporting.** A report documenting survey results, including surveyor name(s), date(s) of survey, location (with maps), weather conditions, and any observations or detections of Mohave ground squirrels shall be prepared and submitted to the CPM and CDFW. In addition, a monitoring report that includes the location, description, and duration of the activities, any observations or detections of the species found during the surveys or project activities shall be provided during monthly and annual compliance reporting.

Verification: The project owner shall submit survey protocols no less than 45 days prior to conducting the surveys and/or site mobilization whichever comes first to the CPM for review and approval and CDFW for review and comment. The project owner shall submit the pre-construction survey reports to the CPM and CDFW no more than 21 days after the survey effort has been completed.

BIO-24 **Lake and Streambed Equivalency Conditions.** The project owner shall implement the following measures to avoid, minimize and mitigate for potential direct and indirect impacts to jurisdictional waters of the state and to satisfy the requirements of California Fish and Game Code, sections 1600 through 1607:

1. **Copies of Requirements, Stop Work Authority:** The project owner shall provide a copy of the Streambed Impact Minimization

and Compensation Measures identified in this condition of certification and any other water related permit conditions to all contractors, subcontractors, and the project owner's project supervisors. This includes copies of the WDR required by **WATER-1**. Copies shall be maintained at each work site and be readily available during periods of active work and must be presented to any the CPM or CDFW upon demand. The CPM reserves the right to issue a stop work order after giving notice to the project owner, if the CPM, in consultation with CDFW, determines that the project owner is not in compliance with any of the requirements of this condition, including but not limited to the existence of any of the following:

a. The information provided by the project owner regarding streambed alteration is incomplete or inaccurate;

b. New information becomes available that was not known to the CEC CPM or the CDFW at the time of project certification; or

c. The project or project activities as approved in the Final Commission Decision have changed.

2. **Provide Maps of Proposed Disturbance Areas.** The project owner shall provide detailed maps of all proposed temporary work areas that have the potential to result in temporary or permanent impacts to any jurisdictional feature. This includes providing maps of work areas around each of the generation tie-line poles, staging areas, pull and tensioning sites, or other work areas. Maps, at an approved scale of all proposed temporary and permanent work areas shall be provided to the CPM and CDFW prior to any site mobilization. At the conclusion of construction, the project owner shall provide a true-up of any jurisdictional features that were subject to temporary or permanent impacts.

3. **General Species Protection Measures.** Species specific protection measures including surveys and monitoring are included in separate conditions of certification. General protective conditions applicable to all species are identified below.

4. **Best Management Practices:** The project owner shall comply with the following conditions to protect drainages near the project disturbance area:

    a. **No In-Water Work.** The project owner shall not operate vehicles or equipment in ponded or flowing water except as described in this condition.

    b. **Stream Diversion.** When work in a flowing stream is unavoid-able, stream flow shall be diverted around or through the work

area during construction operations. Any proposed Stream Diversion Plan shall be submitted to the CPM for review and approval, and the CDFW for review and comment.

c. **Diversion Method.** Stream flow shall be diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses. Any alternative methods shall be included in the Stream Diversion Plan submitted to the CPM under Item 5b.

d. **Work in Dry Weather.** The National Weather Service 72-hr forecast for the project area shall be monitored prior to work proposed in or near drainages. Project activities within drainages shall be restricted if the forecast predicts a 60% chance or more of a greater than ¼-inch of precipitation event within a 24-hour period, unless otherwise approved by the CPM, in coordination with CDFW. Ground-disturbing project activities in drainages shall cease during these events and resume only if the site is not saturated or does not contain ponded or flowing water.

e. **Moving Equipment.** When any activity requires moving of equipment across a flowing drainage, such operations shall be conducted without substantially increasing stream turbidity. Vehicles driven across drainages when water is present shall be completely clean of petroleum residue and water levels shall be below the vehicles' axels.

f. **Materials.** Rock, gravel, and/or other materials shall not be taken from the bed, channel, or bank of any river, lake, or stream.

g. **Temporary Fill.** All temporary fills shall be constructed of pre-approved, non-erodible materials and fill areas shall have a liner between the bottom of the fill and the river, lake, or stream sediments. Following completion of project activities, all temporary fill material shall be removed and the disturbed portions of the bed, channel, and bank shall be returned to previous contours. Minor amounts of fill material that have sunk into the sediment below the natural channel bottom may remain, but only if there is no accretion in bed or channel elevation above the original contour.

h. **Bank Stabilization.** Suitable, non-erodible materials that will withstand wash out shall be used for bank stabilization. Only clean material such as rock riprap free of trash, debris and deleterious material shall be used as bank stabilization, and

placement shall extend above the normal high-water mark. Asphalt and broken concrete are not acceptable materials.

i. **Operating Equipment and Vehicle Leaks.** Any equipment or vehicles driven and/or operated within or adjacent to any lake or stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.

j. **Clean Equipment Prior to Entering Stream.** All heavy equipment that will be entering the live stream shall be cleaned of materials deleterious to aquatic life including oil, grease, hydraulic fluid, soil and other debris prior to entering the water.

k. **Stationary Equipment Leaks.** Stationary equipment such as motors, pumps, generators, and welders, within or adjacent to any lake or stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.

l. **Equipment Maintenance and Fueling.** No equipment maintenance or fueling shall be done within or within 50 ft of any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.

m. **Equipment Storage.** Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of a stream channel and banks and contained in a leakproof berm or other secondary containment.

n. **Staging and Storage Areas.** Staging and storage areas for equipment, materials, fuels, lubricants, and solvents shall be located more than fifty (50) feet from a stream channel and banks. All equipment and fuel stored on site shall be bermed to contain any spilled material and shall be protected from rain. Berms shall consist of plastic covered dirt or sandbags.

o. **Stockpiled Materials.** Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.

p. **Excavation Equipment.** Prior to working within a stream, all equipment shall be closely examined for oil and fuel discharges. Any contaminants shall be cleaned prior to any work within a streambed and shall be maintained daily.

q. **Remove Structures.** Project-related structures and associated materials not designed to withstand high water flows or placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life, wildlife, or riparian habitat shall be moved to areas above high water before such flows occur.

r. **Location of Spoil Sites.** Spoil sites shall not be within a lake or stream or locations that may be subjected to high storm flows, where spoils may be washed back into a lake or stream, or where it may impact streambed habitat, aquatic or riparian vegetation.

s. **Removal of Debris, Materials and Rubbish.** All project generated debris, building materials and rubbish shall be removed and properly disposed of in a legal manner, from a stream and from areas within twenty-five (25) feet of the high-water mark where such materials could be washed into a stream following completion of project activities.

t. **Wash Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.

5. **Hazardous Materials and Concrete**

a. **Hazardous Substances.** Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering the waters of the state.

b. **Toxic Materials.** Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into a stream, or its tributaries shall be contained in watertight containers or removed from the project site.

c. **Hazardous Materials.** Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the project-related activities shall be prevented from contaminating the soil and/or entering the waters of the state.

d. **Sacked Concrete.** The use of sacked concrete, asphalt pieces or asphalt containing pavement grindings within twenty (20) feet of the top-of-bank of a stream /outside of the ordinary high-water mark is prohibited, or where it may enter the channel.

e. **Concrete – Primary Containment.** Wet concrete shall be contained and prevented from entering any lake or stream unless as authorized by this COC. No concrete shall be poured within the high flow line if the 10-day weather forecast indicates any chance of rain above ¼" in a 24-hour period, unless approved by the CPM, in coordination with CDFW.

f. **Concrete – Biological Monitor.** At all times when pouring or working with wet concrete a Designated Biologist and/or Biological Monitor shall be present to inspect containment structures and ensure that no concrete or other debris enters into a lake or stream outside of those structures.

g. **Concrete – Secondary Containment.** Secondary containment shall be installed between the primary containment structures (i.e. headwall form, roadway forms) and the lake or stream to prevent wet concrete from entering into the lake or stream upon failure or leak of primary structures. No concrete shall be poured within the high flow line if the 10-day weather forecast indicates any chance of rain above ¼" in a 24-hour period, unless approved by the CPM, in coordination with CDFW.

h. **Creosote-Treated Wood.** Creosote-treated wood products for decking shall not be used in waters of the state. Alternatives that may be appropriate include steel, concrete, plastic, or wood products treated with preservatives that do not contain creosote or other materials that are deleterious to aquatic life.

i. **Spill Containment.** All activities performed in or near a stream shall have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill. In the event of a spill the project owner shall immediately notify the CPM, CDFW, RWQCB, and the California Emergency Management Agency at 1-800-852-7550, or most current phone number, and immediately initiate the cleanup activities.

6. **Crossings.** The installation of bridges, culverts, or other structures shall be such that water flow (velocity and low flow channel width) is not impaired. Bottoms of temporary culverts shall be placed at or below stream channel grade.

a. **Sized to Accommodate Storm Flows.** If proposed, all crossing sites shall be designed to accommodate the estimated 100-year flow including sediment load and debris without diverting and shall be installed in accordance with design plans and diagrams provided to the CPM for review and approval. Culvert sizing factors shall include culvert capacity loss from placement of the culvert pipe bottom below stream bed grade, transportation of bed load, and the abundance and size of woody debris likely to be introduced to a stream upstream of the culvert crossing, in addition to the 100-year flow.

b. **Alignment.** If used, all crossing structures shall be properly aligned within a stream and shall be otherwise designed and sized to assure resistance to washout and erosion of a streambed, stream banks, and/or fill.

c. **Allow Passage of Wildlife.** Installation of bridges, culverts or other structures shall be such that water flow during storm events is not impaired and upstream or downstream passage of wildlife is assured at all times. Ensure that any debris is cleared if the structure is in place.

d. **Single Pipes Only.** Multiple-pipe crossings shall not be constructed or reconstructed within the bank full channel, unless approved by the CPM in coordination with the CDFW. Completed culvert pipe installations shall result in water flow during rainfall events that is neither impeded nor impounded at the pipe inlet, nor accelerated downstream of the crossing structure.

7. **Vegetation**

a. **Demarcation of Work Areas.** All work areas shall be adequately marked to prohibit unauthorized and unnecessary disturbance to vegetation. All areas shall be mapped and identified on plans for all project personnel.

b. **Vegetation Disposal.** All native vegetation not proposed for salvage (i.e., cuttings) shall be chipped and left on-site in a manner optimizing erosion control purposes in accordance with the recommendations of an erosion control specialist. All non-native vegetation shall be removed and disposed of at an approved disposal location according to state and local laws and ordinances.

c. **Hand tools Near Mature Trees.** Wherever possible, hand tools shall be used (i.e. chainsaws, clippers, brush whackers, etc.) to

remove vegetation near mature native trees as to not damage trees or disturb the substrate.

d. **Remove Debris from Stream Zones.** All removed vegetation and debris shall be moved outside the normal high-water mark prior to inundation by water. All removed vegetation and debris shall be disposed of according to state and local laws and ordinances.

e. **Minimum Removal.** Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. The disturbed portions of any stream channel or lake margin within the high-water mark of a stream or lake shall be restored to as near their original condition as possible.

f. **Stabilize Exposed Areas.** All exposed/disturbed areas within the project site shall be stabilized to the greatest extent possible.

8. Herbicide Use

g. **Herbicide/Pesticide Use Permitted in Accordance with Law.** All herbicide use conditions for mixing, application and clean-up shall conform to all applicable federal, state, and local regulations. Nothing in this condition represents an herbicide/pesticide use recommendation that allows for an action that conflicts with herbicide/pesticide use regulations.

h. **Licensed Applicators Only.** Any application of herbicide shall be overseen by a licensed applicator in accordance with all applicable, federal, state, local laws, and/or guidelines.

i. **Prevent Overspray of Herbicides/Pesticide.** Conduct all treatment activities in a manner to minimize overspray of herbicide on to adjacent native vegetation and where there is no potential of contamination to a river, stream or waters of the state.

j. **Herbicide/Pesticide Mixing.** Ensure that herbicide-mixing sites are located in areas devoid of vegetation, and where there is no potential of a spill reaching a vegetated area or a river, stream or waters of the state.

k. **Avoid Treatment in Sensitive Areas.** Areas identified as sensitive by the Designated Biologist or with suspected occupied nesting or denning habitats shall not be treated with pesticides or herbicides. Environmental damage caused by the application or use of substances that prove harmful to fish and aquatic wildlife per Fish and Game Code, section 5650 shall not occur.

9. **Invasive Species Control and Special Status Species Protection Measures** have been included in separate conditions of certification, see **BIO-10** (Invasive Species Management Plan) and **BIO-7** (General Impact Avoidance and Minimization Measures).

10. **Mitigation for Permanent and Temporary Impacts to State Waters**

    a. **Acquire Off-Site State Waters.** There are no permanent impacts to State waters and no off-site mitigation is proposed. However, if there are unanticipated temporary or permanent impacts to State waters the project owner shall provide verification to the CPM that the lands acquired under **BIO-14** support a minimum of 3:1 ratio for any permanent impacts and 1:1 for temporary impacts to state waters.

Verification: The project owner shall provide the updated Jurisdictional Report that clearly delineates all proposed permanent and temporary impacts, the proposed engineering drawings for each crossing type, and the hydrologic studies used to inform the engineering design to the CPM for review and approval no less than 45 days prior to site mobilization. The project owner shall provide Final Reports and Plans to the CPM and the CDFW no later than 14 days prior to the installation of any engineered crossing, bridge, or new culvert.

Maps of all proposed temporary and permanent work areas shall be provided to the CPM no less than 30 days prior to any site mobilization. At the conclusion of construction, the project owner shall provide a true-up of any jurisdictional features that were subject to temporary or permanent impacts the CPM no more than 30 days following the cessation of construction along the generation tie- line in the Construction Termination Report.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
CULTURAL AND TRIBAL CULTURAL RESOURCES CONDITIONS OF CERTIFICATION

CUL-1 APPOINTMENT AND QUALIFICATIONS OF CULTURAL RESOURCES PERSONNEL

CULTURAL RESOURCE SPECIALIST The project owner shall assign a Cultural Resource Specialist (CRS) to the project. The project owner may elect to assign one or more alternate CRSs as well. The project owner shall submit the resumes of the proposed CRS and Alternative CRS(s), with at least three references and their contact information, to the CEC's Compliance Project Manager (CPM) for review and approval.

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

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

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

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

The CRS shall manage all cultural resource monitoring, mitigation, curation, and reporting activities, and any pre-construction cultural resource activities, unless management of these is otherwise provided for in accordance with the cultural resource and tribal cultural resource COCs. The CRS shall serve as the primary point of contact on all cultural resource matters for the CEC. The CRS shall retain Native American Monitors and may elect to obtain the services of Cultural Resource Monitors (CRMs) and other technical specialists, if needed, to assist in monitoring, mitigation, and curation activities. The project owner shall ensure that the CRS makes recommendations regarding the CEQA

significance of any cultural or tribal cultural resources that are newly discovered or that may be affected in an unanticipated manner. After all ground disturbances are completed and the CRS has fulfilled all responsibilities specified in these cultural and tribal cultural resource COCs, the project owner may discharge the CRS, after receiving approval from the CPM.

CULTURAL RESOURCE MONITORS The CRS may assign CRMs. CRMs shall have the following qualifications:

- B.S. or B.A. degree in anthropology, archaeology, historical archaeology, or a related field; and three years of archaeological field experience in California; or

- A.S. or A.A. degree in anthropology, archaeology, historical archaeology, or a related field, and three years of archaeological field experience in California; or

- Enrollment in upper division classes pursuing a degree in the fields of anthropology, archaeology, historical archaeology, or a related field, and three years of archaeological field experience in California.

NATIVE AMERICAN MONITORS Preference in selecting Native American Monitors shall be given to members or representatives of the Yuhaaviatam of San Manuel Nation, Tejon Indian Tribe, and Kern Valley Indian Community. Monitors should have:

- Traditional ties to the area being monitored

- Knowledge of local Native American village sites and habitation patterns

- Knowledge and understanding of Health and Safety Code, section 7050.5 and Public Resources Code, section 5097.9 et seq.

- Ability to effectively communicate the requirements of Health and Safety Code, section 7050.5 and Public Resources Code, section 5097.9 et seq.

- Ability to work with law enforcement officials and the Native American Heritage Commission (NAHC) to ensure the return of all associated grave goods taken from a Native American grave during excavation

- Ability to travel to project sites within traditional tribal territory

- Knowledge and understanding of Title 14, California Code of Regulations, section 15064.5

- Ability to advocate for the preservation in place of Native American cultural features through knowledge and understanding California Environmental Quality Act (CEQA) mitigation provisions

- Ability to read a topographical map and be able to locate site and reburial locations for future inclusion in the NAHC's Sacred Lands Inventory

- Knowledge and understanding of archaeological practices, including the phases of archaeological investigation

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

Verification: To meet all time requirements set forth in the COCs, the project owner shall submit the prospective CRS's and any Alternate CRS's qualifications at least 45 days prior to the start of ground disturbance associated with site mobilization and construction.

The project owner may replace a CRS by submitting the required resume, references and contact information to the CPM at least 10 working days prior to the termination or release of the then-current CRS. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent CRS is proposed to the CPM for consideration.

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

Within 15 days of receiving from a California Native American tribe a request that Native American Monitors be employed, the project owner shall submit a copy of the request and a copy of a response letter to the group notifying them that Native American Monitors have been employed and identifying the Native American Monitors.

If efforts to obtain the services of qualified Native American Monitors are unsuccessful, the project owner shall inform the CPM of this situation in writing at least 30 days prior to the beginning of post-certification cultural resources field work or construction-related ground disturbance.

At least 5 days prior to additional CRMs or Native American Monitors beginning on-site duties during the project, the CRS shall review the qualifications of the proposed CRMs or Native American Monitors and 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 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 ground disturbance, the project owner shall provide the CRS with copies of the application for certification (AFC), data responses, confidential cultural resources reports, all supplements, the cultural and tribal cultural resources section from the CEC's Final Staff Assessment (FSA), and the cultural and tribal cultural resources COCs from the CEC's Final Decision for the project, if the CRS does not already possess copies of these materials. The project owner shall also provide the CRS and the CPM with maps and drawings showing the footprints of the power plant, all linear facility routes, all access roads, and all laydown areas. Maps shall include the appropriate United States Geological Survey 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 cultural and tribal cultural resources, including any historic built environment resources, identified in the FSA's project area of analysis. If construction of the project would proceed in phases, maps and drawings not previously provided shall be provided to the CRS and CPM prior to the start of each phase. Written notice identifying the proposed schedule of each project phase shall be provided to the CRS and CPM.

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

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

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

Verification: At least 15 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.

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.

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.

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.

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.

If a new CRS is approved by the CPM as provided for in **CUL/TRI-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 AND TRIBAL RESOURCES MITIGATION AND MONITORING PLAN (CTRMMP)** Prior to the start of ground disturbance, the project owner shall submit the CTRMMP, as prepared by or under the direction of the CRS in coordination with the **appropriate cultural resources representative(s) for** the consulting tribes (Yuhaaviatam of San Manuel Nation, Tejon Indian Tribe, and Kern Valley Indian Community) **choosing to participate in the development of the CTRMMP**, to the CPM**. Along with the draft CTRMMP, letters or statements of support of the CTRMMP from the consulting tribes the applicant shall submit documentation demonstrating the project owner's efforts to develop the CTRMMP in coordination with the consulting tribes, describing efforts to engage the consulting tribes, and identifying the consulting tribes who collaborated with the project owner in the development of the CTRMMP. The project owner shall afford the consulting tribes the opportunity to provide letters or statements of support for the CTRMMP to accompany the project owner's submittal**

of the CTRMMP to the CPM for review and approval. Ground disturbance may be initiated only after approval of the CTRMMP by the CPM.

The CTRMMP shall follow the content and organization of the draft model CTRMMP, provided by the CPM, and the authors' name(s) shall appear on the title page of the CTRMMP. The CTRMMP shall identify measures to minimize potential impacts on cultural and tribal cultural resources. Implementation of the CTRMMP shall be the responsibility of the CRS and the project owner. Copies of the CTRMMP shall reside with the CRS, alternate CRS, each CRM, and the project owner's on-site construction manager. No ground disturbance shall occur prior to CPM approval of the CTRMMP, unless such activities are specifically approved by the CPM. Portions of the CTRMMP that describe or map the location(s) of cultural and tribal cultural resources shall be designated as confidential.
The CTRMMP shall include the following elements and measures.

- The following statement included in the Introduction: "Any discussion, summary, or paraphrasing of the Conditions of Certification (COCs) in this CTRMMP is intended as general guidance and as an aid to the user in understanding the COCs and their implementation. The COCs, as written in the Commission Decision, shall supersede any summarization, description, or interpretation of the conditions in the CTRMMP. The Cultural and Tribal Cultural Resources COCs from the Commission Decision are contained in Appendix A."

- A proposed general research design that includes a discussion of cultural research questions and testable hypotheses specifically applicable to the project area, and a discussion of artifact collection, retention/disposal, and curation policies as related to the research questions formulated in the research design. The research design will specify that the preferred treatment strategy for any cultural or tribal cultural resource is avoidance. A specific mitigation plan shall be prepared for any unavoidable impacts to any historical resources, unique archaeological resources, or tribal cultural resources (as defined in the California Environmental Quality Act and determined by the CPM). A prescriptive treatment plan may be included in the CTRMMP for limited data types. 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.

- 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.

- A description of how Native American observers or monitors will be included, the procedures to be used for selecting them, and their roles and responsibilities (including monitoring of archaeological work).

- A statement regarding the disposition of artifacts that includes the identification of potential on-site reburial location(s) for Native American archaeological materials collected because of project activities. Reburial shall not occur until all ground-disturbing activities associated with the project have been completed, all monitoring has ceased, cataloguing and recording of cultural resources have been completed, and final reports issued to the CPM, CHRIS, and consulting tribes. All Native American archaeological materials not subject to the provisions of Public Resources Code, section 5097.98 *et seq.* are subject to a reburial agreement that shall be developed between the project owner and the consulting tribes. The reburial agreement shall be appended to the CTRMMP and outline the determined reburial process and location(s) and include provisions to protect the reburial area(s) from future impacts and to provide access to culturally affiliated California Native American descendants. The CTRMMP shall also include provisions to accommodate culturally appropriate treatment of Native American human remains and associated items that could be preferred by a designated most likely descendent, should Native American human remains be encountered. A description of all impact-avoidance measures (such as flagging or fencing) to prohibit or otherwise restrict access to cultural or tribal cultural resources 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. A statement that all encountered cultural and tribal cultural resources over 50 years old shall be recorded on Department of Parks and Recreation (DPR) 523 forms and mapped and photographed. In addition, all archaeological materials retained during archaeological investigations (survey, testing, data recovery) shall be curated in accordance with the California State Historical Resources Commission's (SHRC's) *Guidelines for the Curation of Archaeological Collections* (1993, or future updated guidelines from the SHRC), into a retrievable storage collection in a public repository or museum.

- A statement that all cultural and tribal cultural resources encountered will be subject to the protocols detailed within the CTRMMP.

- A statement that the removal of any Native American cultural materials shall be conducted in the presence of a tribal monitor representing the

consulting tribes unless otherwise decided by cultural resources representatives of the consulting tribes, and all removed materials shall be temporarily curated on-site.

- A statement that the project owner will pay all curation fees for recovered artifacts and for related documentation produced during cultural and tribal cultural resource investigations conducted for the project. The project owner shall identify three facilities that meet American Association of Museums (AAM)-accreditation that can accept archaeological materials resulting from project activities into their permanent collections and provide for the proper care of these objects in accordance with the SHRC's Guidelines for the Curation of Archaeological Collections (1993, or future updated guidelines from the SHRC). The project owner shall coordinate with the consulting tribes to identify at least one facility located within Kern County willing to curate Native American archaeological materials in their permanent collections. Should it occur that avoidance, preservation in place, and on-site reburial are not an option for the treatment and disposition of Native American archaeological material, the project owner shall release control of those items to the identified facility.

- 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.

- A statement that the CRS has access to equipment and supplies necessary for site mapping, photography, and recovery of any archaeological materials that are encountered during ground disturbance and cannot be treated prescriptively.

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

Verification: 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 CTRMMP for the CRS.

At least 30 days prior to the start of ground disturbance, the project owner shall submit the CTRMMP to the CPM for review and approval.

At least 30 days prior to the start of ground disturbance, in a letter to the CPM, the project owner shall agree to pay curation fees for any materials generated or collected during archaeological investigations (survey, testing, data recovery).

Within 90 days after completion of ground disturbance (including landscaping), if archaeological materials requiring curation were generated or collected, the project owner shall provide to the CPM a copy of an agreement with, or other written commitment from, a curation facility that meets the standards stated in the SHRC's *Guidelines for the Curation of Archaeological Collections* (1993, or future updated guidelines from SHRC), to accept the archaeological materials from this project. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the project owner to pay for those fees. Any agreement concerning curation will be retained and available for audit for the life of the project.

CUL-4 **CULTURAL RESOURCES WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)** Prior to and for the duration of ground disturbance, the project owner shall provide 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 and tribal cultural resources part of this training shall be prepared by the CRS, and shall be conducted by the CRS or an Alternative CRS. WEAP training may be presented in-person, in the form of a video, or as a mix of the two formats. The CRS and/or Alternative CRS shall collaborate with the consulting tribes in preparing and presenting the training. During the training and during construction, the CRS shall be available (by telephone or in person) to answer questions posed by employees. The training may be discontinued when ground disturbance is completed or suspended, but must be resumed when ground disturbance, such as landscaping, resumes. The training shall include:

- A discussion of the cultural sensitivity of the project area;
- A discussion of applicable laws and penalties under law;
- Samples or visuals of artifacts that might be found in the project vicinity;
- A discussion of what such artifacts may look like when partially buried, or wholly buried and then freshly exposed;
- 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;
- Instruction that the CRS, Alternate CRS, and CRMs have the authority to halt ground disturbance around a discovery to an extent sufficient to ensure that the resource is protected from further impacts, as determined by the CRS;

- Instruction that employees, if the CRS, Alternate CRS, or CRMs are not present, are to halt work on their own in the vicinity of a potential cultural or tribal cultural resource 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;

- An informational brochure that identifies reporting procedures in the event of a discovery;

- An acknowledgement form signed by each worker indicating that they have received the training; and

- A sticker that shall be placed on hard hats indicating that environmental training has been completed.

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

Verification: At least 30 days prior to the beginning of ground disturbance, the CRS shall provide the draft text and/or training video for the cultural and tribal cultural resources WEAP, including Native American participation, and graphics and the informational brochure to the CPM for review and approval. The CRS shall also identify who will be conducting the cultural and tribal cultural resources portion of the training.

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.

At least 10 days prior to each WEAP training offered, the CRS shall inform the cultural resources representatives for the consulting tribes of the upcoming training and invite them to attend and/or participate should they elect to. 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-5 UNDISCOVERED CULTURAL RESOURCES The project owner shall ensure that a CRS, alternate CRS, or CRM and Native American Monitor shall be present for any ground disturbance associated with construction of the project, including but not limited to tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal and installation, and hardscape installation.

Prior to the start of ground disturbance, the project owner shall notify the CPM and all interested California Native American tribes of the date on which ground disturbance will begin. Where excavation equipment is actively removing dirt and hauling the excavated material farther than 50 feet from the location of active excavation, full-time archaeological monitoring shall require at least two monitors per excavation area. In this circumstance, one

monitor shall observe the location of active excavation, and a second monitor shall inspect the dumped material. For excavation areas where the excavated material is dumped no farther than 50 feet from the location of active excavation, one monitor shall observe both the location of active excavation and inspect the dumped material.

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

The research design in the CTRMMP shall govern the collection, treatment, retention/disposal, curation, and reburial of any archaeological materials encountered. On forms provided by the CPM, monitors shall keep a daily log of any monitoring and other cultural and tribal cultural resource activities and any instances of non-compliance with the COCs or applicable laws, ordinances, regulations, and standards (LORS). The daily monitoring logs shall at a minimum include the following information.

- First and last name of the monitors
- 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 cultural or tribal cultural resource(s). Specify if work conducted within 1,000 feet of a known cultural resource.
- Work type (machine)
- Work crew (company, operator, and foreman)
- Depth of excavation
- Description of work
- Stratigraphy
- Artifacts, listed with the following identifying features
    - Field artifact #: When recording artifacts in the daily monitoring logs, the CRS shall institute a field numbering system to reduce the likelihood of repeat artifact numbers. A typical numbering system could include a project abbreviation, monitor's initials,

and a set of numbers given to that monitor: e.g., WRESC-MB-123.

    - Description
    - Measurements
    - Universal Transverse Mercator (UTM) coordinates
    - Whether artifacts are likely to be isolates or components of larger resources
    - Assessment of significance of any finds
- Actions taken
- Plan for the next workday

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 monitors for that day
- General description (in paragraph form) of that day's overall monitoring efforts, including monitor names and locations
- Any reasons for halting work that day
- Count and list of all artifacts found that day: include artifact #, location (i.e., grading in Unit X), measurements, UTMs, and very brief description (i.e., historic can, granitic biface, quartzite flake)
- Whether any artifacts were found out of context (i.e., in fill, caisson drilling, flood debris, spoils pile)

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

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

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

- The CRS shall provide daily and/or weekly maps of artifacts at the request of the CPM. A map shall also be provided if artifact locations show complexity, high density, or other unique considerations.

- Maps shall include labeled artifacts, project boundaries, previously recorded sites and isolates, aerial imagery background, and appropriate scales

From the daily monitoring logs, the CRS shall compile a monthly monitoring summary report to be included in the MCR. If there are no monitoring activities, the summary report shall specify why monitoring did not occur.

The Cultural and Tribal Cultural Resources section of the MCR shall be prepared in coordination with the CRS and shall include a monthly summary report of cultural and tribal cultural resources-related monitoring. The summary shall:

- List the number of monitors daily, as well as provide monthly monitoring-day totals

- Give an overview of cultural and tribal cultural resource monitoring work for that month and discuss any issues that arose

- Describe fulfillment of requirements of each cultural and tribal cultural resource mitigation measure

- Summarize the confidential appendix to the MCR, without disclosing any specific confidential details

- Include the artifact concordance table (as discussed below), but with removal of UTMs

Each MCR, prepared under supervision of the CRS, shall be accompanied by a confidential appendix that contains:

- Completed DPR 523A forms for all artifacts recorded or collected in that month. For any artifact without a corresponding DPR form, the CRS shall specify why the DPR form is not applicable or pending (i.e. as part of a larger site update).

- A concordance table that matches field artifact numbers with the artifact numbers used in the DPR 523 forms shall be included. The sortable table shall contain each artifact's date of collection and UTM coordinates and note if an artifact has been deaccessioned or otherwise

does not have a corresponding DPR 523 form. Any post-field log recordation changes to artifact numbers shall also be noted. DPR forms shall be submitted as one combined PDF. The PDF shall organize DPR forms by site and/or artifact number

- The PDF shall include an index and bookmarks

If artifacts from a given location (near each other or an existing resource) are collected month after month, and if agreed upon with the CPM, a final updated DPR 523 form for the resource may be submitted at the completion of monitoring. The monthly concordance table shall note that the DPR 523 form for the included artifacts is pending.

The CRS or alternate CRS shall report daily to the CPM on the status of the project's cultural and tribal cultural resource-related activities, unless reducing or ending daily reporting is requested by the CRS and approved by the CPM. If the CRS and consulting tribes believe that the current level of monitoring is not appropriate in certain locations, a letter or e-mail detailing the justification for changing the level of monitoring shall be provided to the CPM for review and approval prior to any change in the level of monitoring. The CRS, at his or her discretion, or at the request of the CPM, may informally discuss cultural and tribal cultural resource monitoring and mitigation activities with CEC technical staff.

Cultural and tribal 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 COCs.

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

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

Verification: At least 30 days prior to the start of ground disturbance, the CPM will notify all Native Americans with whom the CEC communicated during the project review of the date on which the project's ground disturbance will begin.

At least 30 days prior to the start of ground disturbance, the CPM will provide to the CRS an electronic copy of a form to be used as a daily monitoring log and information to be included in the cover sheet for the daily monitoring logs.

While monitoring is on-going, the project owner shall submit each day's monitoring logs and cover sheet merged into one PDF document by email within 24 hours.

The CRS and/or project owner shall notify the CPM of any incidents of non-compliance with the conditions and/or applicable LORS by telephone or email within 24 hours.

The CRS shall provide daily maps of artifacts along with the daily monitoring logs if more than 10 artifacts are found per day, or as requested by the CPM.

The CRS shall provide weekly maps of artifacts if there more than 50 artifacts are found per week, or as requested by the CPM. The map shall be submitted within two business days after the end of each week.

While monitoring is on-going, the project owner shall submit monthly MCRs and accompanying weekly summary reports. The project owner shall attach any new DPR 523A forms, under confidential cover, completed for finds treated prescriptively, as specified in the CTRMMP.

Final updated DPR 523 forms with sites (where artifacts are collected month after month) can be submitted at the completion of monitoring, as agreed upon with the CPM.

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

Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by California Native American tribes in response to the project owner's transmittals of information.

CUL-6 **AUTHORITY TO HALT CONSTRUCTION IN THE EVENT OF A DISCOVERY** 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.

If a cultural or tribal 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 (within 60 feet) of the discovery sufficient to ensure that the resource is protected from further impacts. If the discovery includes human remains, work in the immediate vicinity (within 100 feet) shall be halted or redirected more than 100 feet away from the discovery, the project owner shall comply with the requirements of Health and Human Safety Code § 7050.5(b) and shall additionally notify the CPM and the NAHC of the discovery of human remains. No action with respect to the disposition of human remains of Native American origin shall be initiated without direction from the CPM. Monitoring, including Native American monitoring, and daily

reporting, as provided in other conditions, shall continue during the project's ground-disturbing activities elsewhere, while the halting or redirection of ground disturbance in the vicinity of the discovery shall remain in effect until the CRS has visited the discovery, and all the following has occurred:

- The CRS has notified the project owner, and the CPM has been notified within 24 hours of the discovery, or by Monday morning if the cultural or tribal cultural resource discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning, including a description of the discovery (or changes in character or attributes), the action taken (i.e., work stoppage or redirection), a recommendation of California Environmental Quality Act (CEQA) significance, and recommendations for data recovery from any cultural or tribal cultural resource discoveries, whether or not a determination of CEQA significance has been made.

- If the discovery would be of interest to California Native American tribes, the CRS has notified all California Native American tribes that expressed a desire to be notified in the event of such a discovery

- 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 CTRMMP, the "Description" entry of the DPR 523 Primary Record form shall include a recommendation on the CEQA significance of the discovery. If the find is of interest to the consulting tribes, the CRS's recommendation on the CEQA significance of the discovery shall be developed in coordination with the consulting tribes. The project owner shall submit completed forms and statements of support of the proposed recommendations from the consulting tribes (for finds of interest to the consulting tribes) to the CPM.

- The CRS, the project owner, the consulting tribes (for finds of interest to the consulting tribes), and the CPM have conferred, and the CPM has concurred with the significance finding concerning the discovery and approved the CRS's proposed data recovery, if any, including the curation of the artifacts, or other appropriate mitigation; and any necessary data recovery and mitigation have been completed

Ground disturbance may resume only with the approval of the CPM.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall provide the CPM and CRS with a letter confirming that the CRS, Alternate CRS, CRMs, and Native American Monitors have the authority to halt ground disturbance in the vicinity of a cultural or tribal cultural resource discovery, and that the project owner shall ensure that the CRS notifies the CPM within 24 hours of a discovery, or by Monday morning if the

cultural resources discovery occurs between 8:00 AM on Friday and 8:00 AM on Sunday morning.

Unless the discovery can be treated prescriptively, as specified in the CTRMMP, 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 or tribal cultural resource.

Within 48 hours of the discovery of a resource of interest to Native Americans, the project owner shall ensure that the CRS notifies all California Native American tribes 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.

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 and designated cultural resources representatives of the California 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.

Within 15 days of receiving them, the project owner shall submit to the CPM copies of any comments or information provided by California Native American tribes in response to the project owner's transmittals of information.

CUL-7 FINAL CULTURAL AND TRIBAL CULTURAL RESOURCES REPORT (CTRR) The project owner shall submit the final CTRR along with letters or statements of support of the CTRR from the consulting tribes to the CPM for approval. The final CTRR shall be written by or under the direction of the CRS, in coordination with the cultural resources representatives of the consulting tribes and shall be provided in the ARMR format. The final CTRR shall report on all field activities including dates, times and locations, results, samplings, and analyses. All survey reports, DPR 523 forms, data recovery reports, and any additional research reports not previously submitted to the California Historical Resources Information System (CHRIS) shall be included as appendices to the final CTRR.

If the project owner requests a suspension of all construction activities for more than 30 days, then a draft CTRR that covers all cultural and tribal cultural resources activities associated with the project shall be prepared by the CRS in coordination with the cultural resources representatives of the consulting tribes and submitted to the CPM along with letters or statements of support of the draft CTRR from the consulting tribes for review and approval on the same day as the suspension/extension request. The draft CTRR shall be retained at the project site in a secure facility until construction resumes or

the project is withdrawn. If the project is withdrawn, then a final CTRR shall be submitted to the CPM for review and approval at the same time as the withdrawal request.

Verification: Within 30 days after requesting a suspension of construction activities, the project owner shall submit a draft CTRR and letters or statements of support from the consulting tribes to the CPM for review and approval.

Within 90 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CTRR and letters or statements of support from the consulting tribes 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.

Within 10 days after CPM approval of the CTRR, the project owner shall provide documentation to the CPM confirming that copies of the final CTRR have been provided to the CHRIS, the curating institution, if archaeological materials were collected, and to the tribal chairpersons and cultural resources representatives of the Yuhaaviatam of San Manuel Nation, Tejon Indian Tribe, Kern Valley Indian Community, and any California Native American tribes that request copies of project-related reports.

CUL-8 **ADDITIONAL SURVEY, EVALUATION, AND DATA RECOVERY** If the project plans change to include any of the areas that were unable to be surveyed or sites that were not formally evaluated, additional surveys will be conducted and any new resources will be recorded as well as any previously recorded resources revisited, and site records updated. The project owner will confer with the consulting tribes regarding newly identified California Native American cultural resources' archaeological significance, its potential as a tribal cultural resource, and avoidance (or other appropriate treatment). Along these lines all resources will be evaluated for the California Register of Historical Resources, which can include archival research and phase II testing. If any of the archaeological resources constitute a historical resource or a unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. If preservation in place is demonstrated to be infeasible (this includes the known historical resources within the WRESC facility) and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Treatment Plan that includes relevant information and research design outlined in **COC CUL/TRI-3**, shall be prepared and implemented by the qualified archaeologist in consultation with the project owner, the consulting California Native American tribes, and the CPM that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist, project owner, and CPM shall consult with appropriate Native American representatives in determining treatment for Native American

resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered. The data recovery will be completed prior to any ground disturbance within the area of the resource and the project owner shall notify the CPM upon completion of any data recovery. Reporting the final data recovery results will be consistent with **COC CUL/TRI-7.**

Verification: If project plans change to include additional areas that were unable to be surveyed, sites that were not formally evaluated, or historical resources that require data recovery because avoidance is not possible, the CPM will be notified within 30 days of any additional survey, evaluations, or data recovery conducted.

CUL-9 CREATE A TROPICO GOLD MINE HISTORIC DISTRICT HISTORY AND MANAGEMENT GUIDELINES DOCUMENT The project owner shall prepare a comprehensive history of the historic district. The project owner shall conduct archival research and acquire contemporary/period photographs to include in the history. It shall be written for the lay public. The project owner shall also create a management guidelines document for the Tropico Gold Mine Historic District and include this history in the management guidelines document. This document shall be written to instruct cultural resource managers and the general public in understanding how to avoid and minimize impacts to historic district. To reduce impacts on the Tropico Gold Mine Historic District to a less than significant level and to ensure that character defining features of the historic district are maintained both the viewshed and the integrity of setting and feeling must be taken into account when managing this resource. As such, the management guidelines document shall address managing visual impacts to the historic district. The project owner is to coordinate with CEC staff and the county of Kern in the creation of these guidelines.

Verification: At least 15 days prior to the start of ground disturbance for the Gen Tie Line route **along Mojave Tropico Road and its connecting route options to Rosamond Boulevard**, the project owner shall provide a brief written statement to the CPM with a schedule concerning the creation of the Tropico Gold Mine Historic District history and management guidelines document. This schedule must include coordination opportunities with the county of Kern and with CEC staff.

Upon completion of the Tropico Gold Mine Historic District history and management guidelines document the project owner shall make it available to the public as well as provide a copy to both CEC staff and the county of Kern.

CUL-10 APPLY RUSTIC BROWN FINISH TO TRANSMISSION POLES NEAR TROPICO GOLD MINE HISTORIC DISTRICT To reduce visual impacts to the Tropico Gold Mine Historic District to a less than significant level, the project owner shall give Gen-Tie line poles adjacent to the Tropico Gold Mine Historic District a rustic brown finish using commercially available colorants

or color treatments, such as Natina, to ensure that the steel poles are less visually obtrusive to the Tropico Gold Mine Historic District. This includes the Gen-Tie line poles along Mojave-Tropico Road and Felsite Avenue between Irone Avenue and 65th Street West.

Verification: At least 30 days prior to the start of ground disturbance for the Gen-Tie Line route the project owner shall provide to the CPM a brief written statement with a schedule concerning the implementation of the Gen-Tie line coloration.

Within 90 days of completion of the portion of the Gen-Tie line route in the vicinity of the Tropico Gold Mine Historic District the project owner shall provide to the CPM a brief written statement stating that the Gen-Tie line route constructed in this vicinity was treated with a commercial colorant or color treatment to ensure the steel poles have a rustic brown finish, and photos of the colored steel poles. If the color treatment requires additional time to take effect, then the project owner shall instead provide to the CPM a brief written statement, with a projected timeline until the coloration has taken effect. The project owner shall also provide photos of the steel poles in the steel poles in the vicinity of the Tropico Gold Mine Historic District once the coloration has taken effect.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
GEOLOGY, PALEONTOLOGY, AND MINERALS CONDITIONS OF CERTIFICATION

GEO-1 As described in the CBC Sections 1803.2 to 1803.5, if the DCBO determines that investigative conditions exist, the project owner shall perform geotechnical investigations for questionable soils, expansive soils, shallow groundwater, deep foundations, rock strata, excavations near foundations, compacted fill material, controlled low-strength material, alternate setback and clearance, and Seismic Design Categories C through F. In accordance with the California Business and Professions Code and CBC Section 1803.1, the geotechnical investigations shall be conducted by a registered design professional.

As described in the CBC Section 1803.6, the project owner shall write a geotechnical report that documents the results from the geotechnical investigations and provides project design recommendations to mitigate geologic hazards. In accordance with the CBC Section 1803.1, the geotechnical report shall be prepared and signed by a California registered geotechnical engineer, certified engineering geologist, and a registered geophysicist, where applicable.

In accordance with the CBC Section 1803.7, the geotechnical investigation report shall include a geohazards report that considers seismic hazards. The geohazard report shall identify site-specific geologic and seismic conditions that may require mitigation. The report shall recommend project design criteria to mitigate geologic and seismic hazards. The project owner shall incorporate recommendations for project design criteria into the final project design. An appropriate qualified California-certified licensed engineering geologist, in consultation with a California registered geotechnical engineer, shall prepare the geohazards portion of the geotechnical report.

Verification: As described in the CBC Section 1803.6, the project owner shall submit a written geotechnical report to the CEC's DCBO for review and approval. The project owner shall provide the CPM copies of the geotechnical investigations and geohazards report and any comments by the DCBO at least 60 days prior to grading.

GEO-2 Final design and construction of underground openings shall be in accordance with all applicable LORS listed below:

- Code of Federal Regulations
  - Title 29, Subtitle B, Chapter XVII, Part 1926, Subpart S
  - Title 30, Chapter I, Subchapter K, Part 57
- U.S. Army Corp of Engineers
  - Engineering Manual 1110-1-1804: Engineering and Design, Geotechnical Investigations

    - Engineering Manual 1110-2-2901: Tunnels and Shafts in Rock
    - Engineering Manual 1110-1-3500: Chemical Grouting Technology
- Guide Specification for Civil Works Construction: Section 02330: Tunnel and Shaft Grouting
- U.S. Bureau of Reclamation Engineering Geology Field Manual, Volumes I and II
- American Concrete Institute
    - ACI 506.2-13: Specification for Shotcrete
    - ACI PRC-506-22: Shotcrete-Guide
- ASTM International
    - 4879-08: Standard Guide for Geotechnical Mapping of Large Underground Openings in Rock. Note, ASTM International withdrew this standard in 2017 and did not replace it.
    - F432-19: Standard Specification for Roof and Rock Bolts and Accessories
- Norwegian Tunneling Society Publication 16: Underground Constructions for the Norwegian Oil and Gas Industry

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of any increment of excavation in the DCBO-approved master drawing and master specifications list, the project owner shall submit to the DCBO the 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 MCR, a copy of a statement from the DCBO that the proposed structural plans, specifications, and calculations were approved and comply with the requirements set forth in applicable engineering LORS.

GEO-3 The project owner shall develop and implement an integrity inspection program for the excavated underground structures, including the cavern and vertical shafts. Program elements shall include:

Procedures, timelines, and triggering events for remote and/or in-person inspections and maintenance under the responsible charge of an appropriate qualified California licensed geologist or engineer.

Procedures and timelines for notifying the CPM of inspection results and maintenance actions.

A plan for how to train workers in safety, awareness, and implementation of the integrity inspection plan.

A plan for how to update the integrity inspection program with information gained from experience.

Verification: At least 30 days (or a project owner and DCBO mutually agreed upon alternative time frame) prior to the start of any increment of excavation in the DCBO-approved master drawing and master specifications list, the project owner shall submit to the DCBO and CPM the integrity inspection plan for review and approval.

PAL-1 The project owner shall provide the CPM with the resume, qualifications, and contact information of its paleontological resource specialist (PRS) for review and approval. The PRS's resume shall demonstrate to the satisfaction of the CPM the appropriate education and experience to accomplish the required paleontological resource tasks. The PRS's resume shall also include the names and phone numbers of references that can be contacted to verify information. As determined by the CPM, the PRS shall meet the minimum qualifications for a Qualified Professional Paleontologist as defined in the Code of Federal Regulations, CFR, Title 43, Subtitle A, Part 49 – Paleontological Resources Preservation and in the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The qualifications of the PRS shall include the following:

1. Institutional affiliations, appropriate credentials, and college degree (M.S., Ph.D., or equivalent).

2. Ability to recognize and collect fossils in the field.

3. Local geological and biostratigraphic expertise.

4. Proficiency in identifying vertebrate and invertebrate fossils.

5. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.

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

1. B.S. or B.A. degree in geology or paleontology and a minimum of one year of relevant paleontological resource monitoring experience in California; or

2. A.S. or A.A. in geology, paleontology, or biology and a minimum of four years of relevant paleontological resource monitoring experience in California; or

3. Enrollment in upper division classes pursuing a bachelor's degree or a more advanced degree in the field of geology or paleontology and a

minimum of three years of relevant paleontological resource monitoring experience in California.

If the approved PRS is replaced prior to completion of project mitigation and submittal of the paleontological resources report (PRR), the project owner shall obtain CPM approval for the replacement PRS. The project owner shall keep resumes on file for the qualified PRSs and PRMs.

The PRM's resume shall include the names and contact information of references. If a PRM is replaced, the resume of the replacement PRM shall also be provided to the CPM for review and approval.

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

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

Prior to any change of the PRS, the project owner shall submit the resume of the proposed new PRS to the CPM for review and approval.

PAL-2 The project owner shall provide the PRS and the CPM, for review and approval, maps and drawings showing the footprint of the power plant, construction laydown areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the project owner shall provide copies to the PRS and CPM. The site grading plan and the plan and profile drawings for the utility lines would be acceptable for this purpose. The plan drawings must show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet (1:480) and 1 inch = 100 feet (1:1,200). If the footprint of the project or its linear facilities change, the project owner shall provide maps and drawings reflecting those changes to the PRS and CPM.

If construction of the project proceeds in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and CPM. Before

work commences on affected phases, the Project owner shall notify the PRS and CPM of any construction phase scheduling changes.

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

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

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.

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

PAL-3 The project owner shall ensure that the PRS prepares a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) and submits it to the CPM for review and approval. Approval of the PRMMP by the CPM shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting, sampling, and reporting activities, and may be modified with CPM approval. The PRMMP shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall include all updates and reside with the PRS, each PRM, the project's on-site manager, and the CPM.

The PRMMP shall be developed in accordance with the Code of Federal Regulations, CFR, Title 43, Subtitle A, Part 49 – Paleontological Resources Preservation and the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The PRMMP shall include, but not be limited to, the following:

1. Procedures for, and assurance, that those procedures would be followed in the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, field work, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation.

2. Identification of the person(s) expected to assist with each of the tasks required by the PRMMP and these COCs.

3. A thorough discussion of the 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 and in which geologic units. This should include descriptions of the sampling procedures that shall be used for fine-grained and coarse-grained units.

5. A discussion of the locations where 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 in the area of the discovery, (c) resuming construction, and (d) how notifications shall 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 to inventory, prepare, and deliver fossil materials the PRS or CPM deem appropriate for curation in a retrievable storage collection at a public repository or museum that 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 shall be met, and the name and phone number of the contact person at the institution.

10. A copy of the paleontological resources COCs.

11. A copy of the daily monitoring log form.

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

PAL-4 Prior to ground disturbance the project owner and the PRS 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 palaeontologic resources and identify procedures they must follow to ensure there are no impacts to sensitive palaeontologic resources.

The WEAP shall include:

1. A discussion of applicable laws and penalties under the law.

2. Good quality photographs or physical examples of fossils expected to be found in units of high palaeontologic sensitivity at, or near, the project site.

3. Information that the PRS and PRM have the authority to stop or redirect construction in the event of a discovery or unanticipated impact on 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 they have received the training.

7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

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

Verification: At least 30 days prior to ground disturbance, the project owner shall submit the draft WEAP, including the brochure and sticker, to the CPM for review and comments. The submittal shall also include a draft training script and the set of reporting procedures for workers to follow.

At least 15 days prior to ground disturbance, the project owner shall submit to the CPM for approval the final WEAP and training script. If the project owner is planning to use a video for training, a copy of the training video shall be submitted following final approval of the WEAP and training script.

PAL-5 No worker shall excavate or perform any ground disturbance activity prior to receiving CPM-approved WEAP training by the PRS, unless specifically approved by the CPM.

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

The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. A WEAP certification of completion form shall be used to document who has received the required training.

Verification: In the Monthly Compliance Report (MCR), the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained, trainer identification, and type of training (in-person and/or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

The resume and qualifications of the trainer shall be submitted to the CPM for review and approval prior to providing WEAP training.

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

PAL-6 The project owner shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading and excavation in areas where potential fossil-bearing materials were identified, both at the site and along any constructed linear facilities associated with the project. If 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 with 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:

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 MCR. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval.

The project owner shall ensure that the PRM(s) keep a daily monitoring log of paleontological resource activities; copies of these logs shall be submitted with the MCR. The name and contact information of PRM(s) and PRS who were making field observations shall be included in the daily log. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the CPM at any time.

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 COCs. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the COCs.

For any significant paleontological resources encountered, either the project owner or the PRS shall notify the CPM within 24 hours. If the resources are encountered on a weekend or holiday, notification shall occur on the morning of the next business day. In the event construction has been stopped because of a paleontological find, such notification shall be provided as soon as practical, but not later than 24 hours after a stop work order has been issued.

For excavations planned in material that is classified as having a moderate to high paleontological sensitivity prior to construction additional precautions may be required. Should excavation methods be proposed that would preclude effective monitoring and examination of paleontological resources encountered during excavation, appropriate mitigation involving education of the public about the lost resources shall be proposed in the PRMMP.

The project owner shall ensure that the PRS prepares a summary of monitoring and other paleontological activities to be included in each MCR. The summary shall include the name(s) of the PRS or PRM(s) active during the month, general descriptions of training and monitored construction activities, and general locations of excavations, grading, and other activities. A section of the report shall include the geologic units or subunits encountered, descriptions of samplings within each unit, and a list of identified fossils.

Negative findings, when no fossils are identified, shall also be reported. A final section of the report shall address any issues or concerns about the project relating to palaeontologic monitoring, including any incidents of non-compliance or any changes to the CPM-approved monitoring plan. 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: A copy of the daily monitoring log of paleontological resource activities shall be included in the MCR.

The project owner shall ensure that the PRS submits the summary of monitoring and paleontological activities in the MCR. When feasible, the CPM shall be notified 15 days in advance of any proposed changes in monitoring different from that identified in the PRMMP, which require concurrence between the PRS and CPM. If there is any unforeseen change in monitoring, the notice shall be given as soon as possible prior to implementation of the change.

PAL-7 The project owner shall ensure preparation of a paleontological resources report (PRR) by the designated PRS. The PRR shall be prepared following the 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's description of sensitivity and significance of those resources, and notes regarding if and how the fossil material was curated in accordance with COC **PAL-3**.

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

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

PAL-8 The project owner, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed, including collection of fossil material, preparation of fossil material for analysis, analysis of fossils, identification and inventory of fossils, preparation of fossils for curation, and delivery for curation of all significant paleontological resource materials encountered and collected during project construction. The project owner shall pay all curation fees charged by the museum for fossil material collected and curated because 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 would be responsible for curating collected specimens. This documentation shall also show that fees were paid for curation and the owner relinquished control and ownership of all fossil material.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
HAZARDS, HAZARDOUS MATERIALS/WASTE, AND WILDFIRE CONDITIONS OF CERTIFICATION

HAZ-1 The project owner shall prepare a Hazardous Materials Business Plan (HMBP) and a Spill Prevention Control and Countermeasure (SPCC) Plan, one of each for construction and one of each for operations, and provide these plans to the Kern County Public Health Services Department - Hazardous Materials Program (the CUPA), for review and comment and to the Compliance Project Manager (CPM) for review and approval.

Verification: At least 60 days prior to the start of construction and 60 days prior to the start of operation, the project owner shall prepare and submit the respective HMBP and SPCC Plan to the Kern County Public Health Services Department - Hazardous Materials Program, 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 Kern County HazMat Compliance Program requesting review and comment.

At least 30 days prior to the start of construction and 30 days prior to the start of operation, the project owner shall provide copies of any comment letters received from the Kern County Public Health Services Department - Hazardous Materials Program along with any changes to the respective HMBP and SPCC plans for CPM review and approval. After CPM review and approval, the project owner shall provide complete copies of the final respective HMBP and SPCC Plan to the Kern County Public Health Services Department - Hazardous Materials Program, sending copies of the correspondence to the CPM.

HAZ-2 After the start of project operation, the project owner shall not use or change the quantity of hazardous materials that would require a change in the project's HMBP unless approved in advance by the CPM.

Verification: At least 30 days prior to changing the quantity of or using a new hazardous material onsite, the project owner shall notify and seek approval from the CPM. The project owner shall provide to the CPM, in the Annual Compliance Report, the HMBP's list of hazardous materials and quantities contained at the facility.

HAZ-3 The project owner shall report new or temporary hazardous waste generator numbers issued by the **USEPA** or **California Department of Toxic Substances Control (DTSC) to the CPM** ~~hazardous waste ID numbers is issued by either the U.S. Environmental Protection Agency (federal ID numbers) or by DTSC (California State ID numbers). identification numbers from the to EPA~~ prior to generating any hazardous waste during demolition, construction, or operations.

Verification: The project owner shall keep a copy of the identification number(s) on file at the project site and provide documentation of the hazardous waste generation and notification and receipt of the number to the CPM in the next scheduled Monthly Compliance Report after receipt of the number. Submittal of the notification and issued number documentation to the CPM is only needed once, unless there is a change in ownership, operation, waste generation, or waste characteristics that requires a new notification to EPA. Documentation of any new or revised hazardous waste generation notifications or changes in identification number shall be provided to the CPM 30 days before the change occurs.

HAZ-4 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:

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

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

HAZ-5 The project owner shall also prepare a site-specific security plan for the ~~commissioning and~~ operational phase~~s~~ that would be available to the CPM for review and approval. The project owner shall implement site security measures that address physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described below as per the latest version of the NERC Security Guideline for the Electricity Sector (**Security Guideline for the Electricity Sub-sector: Physical Security Response. Approved by CIPC on October 28, 2013) or more recent if and when available.**

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 O&M building (or remotely) with cameras able to pan, tilt, and zoom, have low-light capability, and able to view 100 percent of the perimeter fence, and outside entrances to the site for the surface

facilities (pumps, pressure vessels, heat exchangers, electrical generators, and O&M building; and,

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

   A. perimeter breach detection or onsite motion detector capabilities; and

   B. security guard(s) present 24 hours per day, seven days per week; or

   C. facility personnel on site 24 hours per day, seven days per week.

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 facility components, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Corporation (NERC), after consultation with both appropriate law enforcement agencies and the project owner.

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

HAZ-6 The project owner shall prepare and submit to the CPM a Soils Management Plan (SMP) prior to any ground disturbing activities. The SMP shall be prepared/approved by an environmental professional, a California Registered Civil Engineer, or a California Registered Geologist with sufficient experience in hazardous waste management. The purpose of the SMP is to establish appropriate management practices and procedures for handling impacted soil

and/or groundwater or other materials that may be encountered during construction activities to ensure worker protection from toxicant exposure. The SMP shall be updated as needed to reflect changes in laws, regulations, or site conditions. All ground disturbing activities at the site and potential

disposal of contaminated soil and/or groundwater shall be conducted in accordance with the SMP. Where actions are required in accordance with the SMP, an SMP summary report, which includes all analytical data and other findings, shall be submitted once the earthwork has been completed.

Topics covered by the SMP shall include, but not be limited to:

1. Land use history including description and locations of any known contamination.

2. The nature and extent of any previous investigations and remediation at the site.

3. The nature and extent of any unremediated contamination at the proposed site.

4. A listing and description of institutional controls such as the county's excavation ordinance and other local, state, and federal regulations and laws that would apply to the project.

5. Names and positions of individuals involved with site management and their specific roles.

6. An earthwork schedule.

7. A description of protocols for the investigation and evaluation of any previously unidentified contamination that may be encountered in time. The protocol shall be for temporary and permanent controls that may be required to reduce exposure to onsite workers, visitors, and the public.

8. A site-specific Health and Safety Plan (HSP) to be implemented by all contractors and subcontractors at the site. The HSPs shall be specific to each of the contractors' or subcontractors' scopes of work. The HSPs shall be prepared by a Certified Industrial Hygienist and would protect onsite workers by including engineering controls, personal protective equipment, monitoring, and security to prevent unauthorized entry and to reduce construction related hazards. The HSPs shall address the possibility of encountering subsurface chemical contamination and include procedures to protect workers and the public. The HSPs shall be updated as needed if site conditions change significantly, such as discovery of contaminated soil or groundwater. Copies of the approved HSPs shall be kept at the project site.

10. Hazardous waste determination and disposal procedures for known and previously unidentified contamination.

11. Requirements for site-specific techniques at the site to minimize dust, manage stockpiles, run-on and run-off controls, waste disposal procedures, etc.

A. 11. Copies of relevant permits or closures from regulatory agencies.

Verification: At least 45 days prior to any ground disturbance, the project owner shall submit the SMP to the Kern County Public Health Services Department - Hazardous Materials Program for review and comment and to the CPM for review and approval. An SMP summary shall be submitted to the CPM within 30 days of completion of any ground disturbance.

HAZ-7 The project owner shall provide the resume of an experienced and qualified environmental professional who shall be available for consultation during site characterization (if needed), demolition, excavation, and grading activities, to the CPM for review and approval. The resume shall reflect experience in remedial investigation and feasibility studies. The environmental professional performing the interviews and site reconnaissance shall possess sufficient education, training, and experience to assess the nature, history, and setting of the subject property/area and shall review and interpret the information used to form the basis of the findings, opinion and conclusions in the report.

The qualified person shall be given full authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil and/or groundwater.

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

HAZ-8 If suspected contaminated soil and/or groundwater 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 qualified environmental professional 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, the Kern County Public Health Services Department - Hazardous Materials Program and the CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the environmental professional 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 environmental professional, significant remediation may be

required, the project owner shall contact the CPM and representatives of the Kern County Public Health Services Department - Hazardous Materials Program and possible oversight.

Verification: The project owner shall submit any final reports filed by the environmental professional 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.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
LAND USE, AGRICULTURE, AND FORESTRY CONDITIONS OF CERTIFICATION

LAND-1 Prior to the commencement of construction, the project owner shall provide the Kern County Planning and Natural Resources Department with the location of all properties accepting excavated rock from the project in unincorporated Kern County, including quantity of rock to be accepted. All appropriate permits shall be obtained for the locations identified to stockpile or otherwise utilize the excavated rock.

Prior to the commencement of construction, the project owner shall obtain any necessary permits from the Kern County Planning and Natural Resources Department, or other relevant departments, for development of temporary laydown and parking areas **referred to as VH**. **The project owner shall pay Kern County fees for review and comment and demonstrate compliance with requirements for development of the laydown and parking areas referred to as P1, P2 N, and P2 S.**

The project owner shall ensure that local regulations are complied with during construction, operation, and restoration of laydown and parking areas.

Verification: At least 30 days prior to development of any temporary laydown and parking areas, the project owner shall provide to the CPM the required approved permits ~~from~~ **for the temporary laydown or parking area VH and provide documentation showing payment of Kern County fees for review and comment of the laydown and parking areas P1, P2 N, and P2 S and demonstrating compliance with requirements of** the Kern County Planning and Natural Resources Department, or any other relevant departments.

LAND-2 Prior to any grading or development for the permanent project facilities under CEC jurisdiction (including the WRESC and gen-tie line) the project owner shall develop a construction site plan (including the temporary rock crushing facility and concrete batch plant) and operation site plan and submit it to the Kern County Planning and Natural Resources Department for review and comment to ensure compliance with local regulations, including conditions required by the ALUCP. The project owner shall adhere to CPM-approved site plans during construction and operation and ensure that local regulations are complied with during construction and operation of the permanent project facilities.

Verification: At least 60 days prior to any grading or development for permanent project facilities under CEC jurisdiction (including the WRESC, gen-tie line, and a potential architectural berm) the project owner shall submit proposed site plans for

these facilities to the Kern County Planning and Natural Resources Department for review and comment, and to the CPM for review and approval. The project owner shall provide any review comments from Kern County to the CPM at least 30 days prior to any grading or development for these permanent project facilities.

LAND-3 Prior to the commencement of construction of any linear facilities on BLM land, the project owner shall obtain a ROW grant or similar authorization from the Bureau of Land Management (BLM) for any development on BLM-managed public land.

Verification: At least 60 days prior to construction of any linear facilities on BLM land, the project owner shall submit to the CPM documentation showing BLM's approval of a ROW grant or similar authorization for all development on BLM land. The project owner shall also demonstrate compliance with the BLM's conditions.

LAND-4 Prior to the commencement of construction of each project feature requiring an FAA No Hazard Determination, the project owner shall file Form FAA 7460-1, "Notice of Construction or Alteration", for the main project facility structures, for construction equipment that meets the notice criteria of 14 CFR Part 77, and for any new or relocated transmission poles that require and have not yet received FAA Determinations. The project owner shall comply with all FAA Determinations and requirements, including notification of the FAA within 5 days of when each structure reaches its highest height.

Verification: The project owner shall obtain an FAA Determination of No Hazard prior to construction of the main project facility structures, erection of construction equipment that meets the notice criteria of 14 CFR Part 77, or construction of any new or relocated transmission poles that require and have not yet received Determinations. At least 30 days prior to construction of the main project facility structures, erection of construction equipment, or construction of new transmission poles subject to the FAA's 7460-1 process, the project owner shall provide to the CPM copies of all FAA Determinations for the facilities to be constructed or erected.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
NOISE AND VIBRATION CONDITIONS OF CERTIFICATION

NOISE-1 Prior to the start of ground disturbance, the project owner shall notify residences within one mile of the project site and 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 project-related noise complaints.3 The project owner or its authorized agent shall:

- use the Noise Complaint Resolution Form (shown below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to the noise complaint;
- attempt to contact the person(s) making the noise complaint within 24 hours;
- conduct an investigation to determine the source of noise in the complaint;
- if the noise is project related, take all feasible measures to reduce the source of the noise; and
- submit the Noise Complaint Resolution Form to the CPM documenting the complaint and actions taken. The form 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 noise complaint, the project owner shall file with the CPM the Noise Complaint Resolution Form, that documents the resolution of the complaint. If mitigation is required to resolve the complaint, and the complaint is not resolved within three business days, 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 with Title 8, California Code of Regulations, Sections 5095-5099, and Title 29, Code of Federal Regulations, Section 1910.95.

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

NOISE-4 **OPERATIONAL NOISE RESTRICTIONS**. The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that noise due to the operation of the project **plus ambient** will not exceed 55 dBA Leq during daytime hours of 7 A.M. to 10 P.M. and 54 dBA Leq during nighttime hours of 10 p.m. to 7 A.M. at NSA-1.

The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that noise due to the operation of the project plus ambient will not exceed ~~46~~**58** dBA Leq during daytime hours 7 A.M. to 10 P.M. and ~~43~~**48** dBA Leq during nighttime hours of 10 P.M. to 7 A.M. at NSA-7.

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

When the project first achieves a sustained output of 85 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey at NSA-1 and NSA-7 by someone who represents the project owner and is

qualified to conduct noise surveys. This survey during project's operation shall also include measurement of one-third octave band sound pressure

levels at the above location to ensure that no new pure-tone noise components have been introduced.

If the results from the noise survey indicate that the power plant noise levels at the affected receptors, NSA-1 and NSA-7, exceed the above value for any given hour during the survey, mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.

If the results from these noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

Verification: The survey shall take place within 45 days of the project first achieving a sustained output of 85 percent or greater. Within 30 days after completing the survey, the project owner shall submit a summary report of the survey to the CPM. Included in the survey report will be a description of any additional mitigation measures necessary to achieve compliance with the above listed noise limits, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey.

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

NOISE-5 **OCCUPATIONAL NOISE SURVEY**. Following the project's attainment of a sustained output that produces the highest noise level, the project owner shall conduct an occupational noise survey to identify any noise hazardous areas within the power plant.

The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations, Sections 5095-5099 and Title 29, Code of Federal Regulations, Section 1910.95(g)(3). 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 hazard controls against occupational noise exposures to be employed in order to comply with the above 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 Cal-OSHA upon request from Cal-OSHA.

NOISE-6 **CONSTRUCTION NOISE RESTRICTIONS**. Heavy equipment operation and noisy4 construction work relating to any project features, including linear facilities and pile driving within 1,000 feet of an occupied

residential dwelling, and controlled detonations shall be restricted to the times delineated below:

Mondays through Fridays: 6:00 A.M. to 9:00 P.M.

Saturdays and Sundays: 8:00 A.M. to 9:00 P.M.

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

Avoid Controlled Detonations at Night. Controlled detonations shall be limited to daylight hours and shall terminate 30 minutes before sunset and shall not resume until 30 minutes after sunrise, unless authorized by the CPM. Sunrise and sunset times are established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area where the project is located. The schedule of controlled detonations shall be provided to the CPM.

Construction activities associated with the gen-tie transmission lines and poles within 1,000 feet of an occupied residence or school shall implement the following measures or other sound attenuating mitigation measures practicable.

- Provide noise-producing equipment with noise-attenuating shields, shrouds or portable barriers or enclosures, and acoustical lining or acoustical paneling;
- Use electric construction equipment instead of diesel-powered and gasoline-powered equipment;
- Conduct truck loading, unloading, and hauling operations so noise is kept to a minimum.

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.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
PUBLIC HEALTH CONDITIONS OF CERTIFICATION

PH-1 The project owner shall develop and implement a Valley Fever Management Plan to minimize personnel and public exposure to potential Valley Fever. The Valley Fever Management Plan shall include the following:

a. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off site to other work locations.

b. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground.

c. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.

d. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying.

e. To the greatest extent feasible, heavy-duty earth-moving vehicles shall be closed-cab and equipped with a High Efficiency Particulate Arrestance (HEPA)-filtered air system.

f. Workers shall receive training in procedures to minimize activities that may result in the release of airborne Coccidioides immitis (CI) spores, to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within five days of the training session.

g. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.

h. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal, upon request. When exposure to dust is unavoidable, provide appropriate NIOSH-approved

respiratory protection to affected workers. If respiratory protection is deemed necessary, employers must develop and implement a respiratory protection program in accordance with Cal/OSHA's Respiratory Protection standard (8 CCR 5144).

Verification: At least 30 days prior to the start of the ground disturbance, the project owner shall submit the Valley Fever Management Plan to the CPM for review and approval. The CPM will notify the project owner of any necessary modifications to the plan within 15 days from the date of receipt. The project owner shall provide the CPM a Monthly Compliance Report to include a summary of all actions taken to maintain compliance with this condition.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
SOCIOECONOMICS CONDITIONS OF CERTIFICATION

SOCIO-1 The project owner and its contractors shall make a good faith effort to hire at least 50 percent of their workers from local Kern County communities. The project owner shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.

Verification: At least 60 days prior to the start of construction, the project owner shall submit a letter to the CEC's Compliance Project Manager (CPM) detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities.

SOCIO-2 The project owner shall pay the current one-time statutory school facility development fee to Mojave Unified School District as authorized by Education Code Section 17620 and the Mojave Unified School District Board Policy BP 7211 Facilities: Developer Fees.

Verification: At least 30 days prior to the start of construction, the project owner shall provide to the CPM proof of payment to the Mojave Unified School District of the statutory development fees.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
SOLID WASTE MANAGEMENT CONDITIONS OF CERTIFICATION

SOLID WASTE-1 The project owner shall prepare a Construction Waste Management Plan and an Operation Waste Management Plan for all wastes generated during construction and operation of the facility, respectively, and shall submit both plans to the Compliance Project Manager (CPM) for review and approval. The plans shall contain, at a minimum, the following:

· A description of all waste streams, including projections of frequency, amounts generated, and hazard classifications.

· Methods of managing each waste, including treatment methods and entities contracted for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.

· A description of methods for maintaining waste shipping and disposal documents, including manifest and bills of lading, receipts and invoices. All waste shipping papers, receipts, and applicable documentation shall be readily available for review.

Verification: No less than 30 days prior to the start of site mobilization, the project

owner shall submit the Construction Waste Management Plan to the CPM for review and approval.

The Operation Waste Management Plan shall be submitted to the CPM for review and approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions within 20 days of notification by the CPM.

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

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
TRANSMISSION LINE SAFETY AND NUISANCE CONDITIONS OF CERTIFICATION

TLSN-1 The project owner shall construct the proposed 230-kV transmission lines according to the requirements of California PUC'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 SCE's EMF reduction guidelines.

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

TLSN-2 The project owner shall ensure that the route of the proposed transmission lines is kept free of combustible material, as required under the provisions of GO-95 and section 1250 of Title 14 of the California Code of Regulations.

Verification: During the first five 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-3 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.

TLSN-4 The project owner shall measure the maximum strengths of the line EMF at the edge of the ROW 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/IEEE) and (b) before and after energizing. 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-energizing measurements with the CPM within 60 days after completion of the measurements.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
TRANSPORTATION CONDITIONS OF CERTIFICATION

TRANS-1 Prior to the start of construction, the project owner shall prepare a Construction Traffic Management Plan (CTMP). The CTMP shall address the movement of workers, vehicles, equipment, and materials, including arrival and departure schedules, carpooling, a parking/staging plan, and designated workforce and delivery routes. Traffic control plans shall be prepared as necessary to address construction staging, as well as any roadway or lane closures and shall include any signage or roadway lighting improvements deemed necessary during construction. The CTMP shall address means of access for emergency vehicles to the project site, as well as means of maintaining access to any adjacent residential and commercial property during the construction and maintenance of the project.

The CTMP shall include procedures to restore damage to existing roadways caused by project construction traffic, including corresponding traffic index calculations. The construction contractor shall work with Kern County and Caltrans to prepare a schedule and mitigation plan for the roadways along construction routes, in accordance with the procedures established by the CTMP.

The CTMP shall include measures to ensure safe ingress and egress at the project access intersections. Measures may include removal of vegetation to provide unobstructed line of sight, addition of advanced warning signs, and active work zone traffic control/traffic management as approved by the CPM. The CTMP shall also be submitted to Kern County and Caltrans for review and comment.

Verification: At least 60 calendar days prior to the start of construction, the project owner shall submit the CTMP to Kern County, Caltrans, and California Highway Patrol (CHP) 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 Kern County, Caltrans, and CHP requesting review and comment.

The CTMP shall include TDM measures to reduce project-generated VMT during construction. The CTMP shall outline VMT reduction measures, which may include, by way of example, the following:

· Provide information regarding lodging for specialized workers about lodging options close to the site.

· Create or promote existing carpooling programs to encourage employees to carpool.

· Offer a shuttle service for employees with pick-up points at nearby hotels housing specialized workers or park-and-ride lots.

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

TRANS-2 The project owner shall provide an irrevocable offer of dedication to Kern County for the following roadways:

• Dawn Road: 55 feet from the centerline along the entire subject property and the off-site portion from the westerly project boundary to the westerly boundary of Lot 3 of County Parcel Map No. 260.

• Sierra Highway: 45 feet from the centerline on both sides, totaling 90 feet in width.

Concurrent with the site mobilization and grading activities ~~Prior to construction~~, the project owner shall also **commence construction of** ~~construct~~ an asphalt concrete paved road approach at the proposed Dawn Road entrance at Sierra Highway, extending 200 feet into the project site.

Prior to the commencement of operations, the project owner shall pave Dawn Road from the project entrance westerly to the Caltrans boundary at SR 14. The paving shall meet Type B Standards, including:

• 60-foot-wide roadway with paved shoulders

• Structural sections suitable for heavy truck traffic

• Asphalt concrete surfacing and necessary tie-ins

The project owner shall ensure that site access intersections and corresponding roadway and parking improvements are designed according to standards adopted by Kern County and, where applicable, Caltrans, to ensure safe ingress and egress at the project access intersections during the construction and operation phases.

Verification: The project owner shall ensure that all proposed on-site access and parking improvement plans for both the construction and operation phases are submitted to Kern County and Caltrans for review and comment, and to the CPM for review and approval before construction begins.

The project owner shall offer right-of-way dedication for the segments of Dawn Road and Sierra Highway adjacent to the project site prior to the start of construction.

Concurrent with the site mobilization and grading activities ~~Prior to construction~~, the project owner shall obtain an encroachment permit from the Kern County Public Works Department to construct an asphalt concrete paved road approach at the proposed Dawn Road entrance at Sierra Highway, extending 200 feet into the project site.

Prior to the commencement of operations, the project owner shall obtain an encroachment permit from the Kern County Public Works Department and pave Dawn Road from the project entrance west to the Caltrans right-of-way at SR 14.

The project owner shall also obtain an encroachment permit from Caltrans prior to construction for any site access improvements within Caltrans right-of-way.

TRANS-3 The project owner shall comply with limitations imposed by Caltrans and other relevant jurisdictions, including the Kern County, on vehicle sizes, weights, driver licensing, and truck routes.

Verification: The project owner shall retain copies of permits and supporting documents on-site for CPM inspection if requested.

TRANS-4 The project owner shall ensure that contracts with third party vendors include a representation that any permits and/or licenses are secured from the relevant administering agency, including Kern County, Caltrans, and CHP for the transport of hazardous materials.

Verification: The project owner shall include in its monthly compliance reports copies of all permits/licenses acquired by the project owner and/or vendors concerning the transport of hazardous substances.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
VISUAL RESOURCES CONDITIONS OF CERTIFICATION

VIS-1 The project owner shall use exterior surface coatings, colors, finishes, materials, and a gloss level that diffuse illumination or collection, reflectance and scattering offsite and skyward from the exterior surfaces of the project buildings, structures, and equipment (project components), and specifically include:

a. An exterior surface coating, color, finish, material, and gloss level that minimize contrast and do not introduce specular reflection in the existing physical landscape.

b. An exterior surface coating, color, finish, material, and gloss level that is in conformance with applicable adopted architectural design and site development related policies and ordinances of the County of Kern.

The project owner shall submit to the CPM for approval an exterior surface coatings, colors, finishes, and materials plan for the project buildings, structures and equipment that satisfy the above requirements and include the following:

1. A list of the large/major buildings, equipment, structures; perimeter wall and/or fence; transmission line towers and/or poles; above ground pipelines

serving the facility onsite and offsite in public view, and a list of their proposed exterior surface coatings, colors, finishes, and materials identified by vendor, name and number, and according to the RAL color matching system or similar universal designation system. The standard environmental colors (PC02-PC10) from the BLM Standard Environmental Color Paint Tool may also be used.

2. The identification of suitable colors will be determined through a study focused on selecting colors for project components compatible with the surrounding physical landscape. Prior to large-scale implementation, proposed color choices shall be tested under field conditions to confirm their effectiveness.

3. Supply one set of brochures showing coating/color chips, and/or samples of the coatings/colors or finish, materials to be applied/installed to buildings, equipment, and structures.

4. A time schedule for the completion of the application/installation of the coating, color, finish, and materials.

5. A maintenance plan that includes procedures for the upkeep of the coatings, colors, finishes, and materials for the life of the project.

The project owner shall not purchase product or service from a vendor for the project exterior surface coatings, colors, finishes, materials prior to CPM approval of the exterior surface coating, color, finish, and materials plan.

Verification:

a. The project owner shall submit an exterior surface coating, color, finish, and materials plan to the CPM for approval and simultaneously to the Director of Planning and Natural Resources Department for the County of Kern for review and comment ninety (90) days prior to executing a contract to purchase coating, color, finish and materials with a vendor. The CPM shall provide the Director of Planning and Natural Resources Department at least 30 days to review the plan and provide comments to the applicant and the CPM.

b. If the CPM determines that the exterior surface coating, color, finish, and materials plan requires a revision, the project owner shall provide to the CPM a plan with the specified revision(s) for approval by the CPM before any action or activity with the vendor is executed. Any revision to the plan must be approved by the CPM.

c. The project owner shall notify the CPM that exterior surface coatings, colors, and finishes of all listed buildings, equipment, and structures has been completed are ready for inspection. With this notification, the applicant shall supply to the CPM one set of color photographs showing the project from the key observation points evaluated for the project certification, and individual color photographs showing the completed exterior surface coatings, colors,

finishes, and materials for the following: six spherical hot water tanks, four low pressure exhaust stacks, two closed cooling water tanks, the administration/control room and maintenance building, and one aboveground transmission gen-tie pole structure on the route along Rosamond Boulevard, near LADWP overhead transmission line route easement, and any other building, equipment, and structure as requested by the CPM. Color photographs may be electronically filed or manually filed on electronic media.

d. Exterior surface coatings, colors, finishes, and materials shall be installed/applied (completed) on the exterior surfaces of the large/major buildings, equipment, and structures prior to the start of commercial operation.

e. The project owner shall supply a description of the condition (status) of the exterior surface coatings, colors, finishes, and materials for the large/major

buildings, equipment, structures, and others as needed for the reporting year in the Annual Compliance Report. The report shall include:

1. The condition of the exterior surfaces of buildings, equipment, and structures at the end of the reporting year.

2. A listing of maintenance activities performed during the reporting year.

3. A tentative time schedule for maintenance activities for the upcoming year.

VIS-2 Outdoor signs installed on the project site and the construction laydown, parking and storage areas shall comply with the sign regulations of the applicable base zone district and Chapter 19.84 of the County of Kern Zoning Ordinance.

The project owner shall submit to the CPM for approval and simultaneously to the Director of Planning and Natural Resources Department for the County of Kern for review and comment a sign or signage plan or equivalent plan prepared for the project, project site, and construction laydown, parking and storage areas in compliance with the above requirements and prior to the installation of any sign.

Verification:

a. The project owner shall submit a sign or signage plan to the CPM for approval and simultaneously to the Director of Planning and Natural Resources Department for the County of Kern for review and comment thirty (30) days prior to installation. The CPM shall provide the Director of Planning and Natural Resources Department at least 30 days to review the plan and provide comments to the applicant and the CPM.

If the CPM determines that the sign or signage plan requires a revision, the project owner shall provide to the CPM a plan with the specified revision(s)

for approval by the CPM before any installation of a sign. Any revision to the plan must be approved by the CPM.

VIS-3 New outdoor light and glare emitted from the project site and construction laydown area shall not result in light being a pollutant offsite and skyward, "light pollution." The project owner shall include use of luminaires that:

a. Only be on when needed.

b. Only light the area that needs it.

c. Illuminate no brighter than necessary.

d. Minimize blue light emissions.

e. Are fully shielded (BUG Rating U0).

f. Are DarkSky International "DarkSky Approved" program products.

g. Comply with the applicable adopted outdoor lighting regulations of the County of Kern (Section 19.81 Outdoor Lighting "Dark Skies Ordinance").

The project owner shall submit to the CPM for approval and simultaneously to the Director of Planning and Natural Resources Department for the County of Kern for review and comment a light pollution control plan or equivalent plan prepared for the project that satisfy the above requirements and include the following:

1. Supply one set of product brochures and/or printouts (e.g., diagram, drawing) showing and describing the types of outdoor luminaires to be applied/installed to buildings, equipment, structures, and other locations on the project site (lighting schedule).

2. A diagram(s) or drawing(s) of the project site showing the approximate location of the installation/placement of the luminaire and its direction and angle (luminaire location).

Verification:

a. The project owner shall submit a light pollution control plan to the CPM for approval and simultaneously to the Director of Planning and Natural Resources Department for the County of Kern for review and comment ninety (90) days prior to executing a contract to purchase permanent outdoor luminaires for the project. The CPM shall provide the Director of Planning and Natural Resources Department at least 30 days to review the plan and provide comments to the applicant and the CPM.

b. If the CPM determines the light pollution control plan requires a revision, the project owner shall provide to the CPM a plan with the specified revision(s) for approval by the CPM before any action or activity with the vendor is executed. Any revision to the plan must be approved by the CPM.

c. The project owner shall notify the CPM when the installation of the luminaires has been completed and are ready for inspection. After inspection if the CPM requires a modification to a luminaire(s) (e.g., design, installation, location), the project owner

shall have 30 days after receiving the notification to complete the modification and request a follow-up inspection.

d. If a light and glare complaint is filed with the project owner within 48 hours of receiving the complaint, the project owner shall supply the CPM with a completed complaint resolution form report as specified in the Compliance Conditions, a proposal to resolve the complaint and time schedule for resolution. The project owner shall notify the CPM within 48 hours after completing/resolving the complaint.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
WATER RESOURCES CONDITIONS OF CERTIFICATION

WATER-1 CONSTRUCTION DRAINAGE, EROSION AND SEDIMENTATION CONTROL PLAN. Prior to site mobilization, the Project owner shall obtain approval from the Compliance Project Manager (CPM) of the Drainage Erosion and Sedimentation Control Plan (DESCP) for managing stormwater during Project construction and operations. The DESCP must ensure proper protection of water quality and soil resources, demonstrate no increase in off-site flooding potential, include provisions for sediment and stormwater retention from both the main facility and transmission right of way, and identify all monitoring and maintenance activities. The DESCP shall contain, at minimum, the elements presented below that outline site management activities and erosion and sediment-control BMPs to be implemented during site mobilization, excavation, construction, and post construction (operating) activities.

A. **Vicinity Map** – A map(s), at a minimum scale 1 inch=500 feet, shall be provided indicating the location of all Project elements (construction sites, laydown area, pipelines) with depictions of all significant geographic features including swales, storm drains, and sensitive areas.

B. **Site Delineation** – All areas subject to soil disturbance for the proposed Project (Project phases, laydown area, all linear facilities, landscaping areas, and any other Project elements) shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.

C. **Watercourses and Critical Areas** – The DESCP shall show the location of all nearby watercourses including swales, storm drains, and drainage ditches. It shall indicate the proximity of those features to the proposed Project construction, laydown, and landscape areas and all transmission and pipeline construction corridors.

D. **Drainage Map** – The DESCP shall provide a topographic site map(s), at a minimum scale of 1 inch=200 feet, showing existing, interim, and proposed drainage swales and drainage systems and drainage-area boundaries. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off site for a minimum distance of 100 feet.

E. **Drainage of Project Site Narrative** – The DESCP shall include a narrative of the drainage measures necessary to protect the site and potentially affected soil and water resources within the drainage downstream of the site. The narrative shall include the summary pages from the hydraulic analysis prepared by a professional engineer and erosion control specialist. The narrative shall state the watershed size(s) in acres that was used in the calculation of drainage features.

F. **Clearing and Grading Plans** – The DESCP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography shall be illustrated by tying in proposed contours with existing topography.

G. **Clearing and Grading Narrative** – The DESCP shall include a table with the estimated quantities of material excavated or filled for the site and all Project elements (Project site, laydown area, transmission and pipeline corridors, roadways, and bridges) whether such excavation or fill is temporary or permanent, and the amount of such material to be imported or exported.

H. **Soil Wind and Water Erosion Control** - The plan shall address exposed soil treatments to be used during construction and operation of the proposed Project for both road and non-road surfaces including specifically identifying all chemical based dust palliatives, soil bonding, and weighting agents appropriate for use at the proposed Project site that would not cause adverse effects to vegetation. BMPs shall include measures designed to prevent wind and water erosion including application of chemical dust palliatives after rough grading to limit water use. All dust palliatives, soil binders, and weighting agents shall be approved by the CPM prior to use.

I. **Best Management Practices Plan** – The DESCP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading, Project element excavation and construction, and final grading/stabilization). BMPs shall include measures designed to control dust, stabilize construction access roads and entrances, and control storm water runoff and sediment transport.

J. **Best Management Practices Narrative** – The DESCP shall show the location (as identified in (I) above), timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to

initial grading, during all Project element (site, pipelines) excavations and construction, final grading/stabilization, and operation. Separate BMP implementation schedules shall be provided for each Project element for each phase of construction. The maintenance schedule shall include post-construction maintenance of structural-control BMPs, or a statement provided about when such information would be available.

K. **Project Schedule** – The DESCP shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, Project element construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each Project element for each phase of construction.

L. **Erosion Control Drawings** – The erosion-control drawings and narrative shall be designed, stamped and sealed by a professional engineer or erosion control specialist.

M. **Agency Comments** – The DESCP shall include copies of recommendations, conditions, and provisions from the California Department of Fish and Wildlife (CDFW) and LRWQCB.

N. **Monitoring Plan** – Monitoring activities shall include routine measurement of the volume of accumulated sediment in the onsite drainage ditches, and storm water diversions.

Verification: No later than thirty (30) days prior to start of site mobilization, the Project owner shall submit a copy of the final DESCP to the CPM for review and to Kern County and the LRWQCB if required. The CPM shall consider comments if received by the county and LRWQCB before approval of the DESCP. The DESCP shall be consistent with the grading and drainage plan as required by Condition of Certification **CIVIL-1**, and relevant portions of the DESCP shall clearly show approval by the chief building official. The Project owner shall provide in the monthly compliance report with a narrative on the effectiveness of the drainage, erosion, and sediment-control measures and the results of monitoring and maintenance activities. Once operational, the Project owner shall update and maintain the DESCP for the life of the Project and shall provide in the annual compliance report information on the results of monitoring and maintenance activities.

WATER-2 WASTE DISCHARGE REQUIREMENTS ~~FOR DRILL CUTTING PONDS~~. The project owner shall comply with the Waste Discharge Requirements (WDRs) established in Attachment A. These requirements relate to discharges, or potential discharges, of waste that could affect the quality of waters of the state, and were developed in consultation with the State Water Resources Control Board and/or the applicable California

Regional Water Quality Control Board (hereafter "Water Boards"). The WDRs established in Attachment A serve as if they were prescribed under Water Code section 13263 by the Water Boards. These requirements are enforceable by both the Commission and the Water Boards. The Water Boards are authorized to verify compliance of these WDRs, including conducting investigations and inspections and requiring technical and monitoring reports. The Water Boards are also authorized, in coordination with the Commission, to enforce the WDRs pursuant but not limited to Water Code sections 13300, 13301, 13304, and 13350. The Commission and the Water Boards shall confer with each other and coordinate, as needed, in the enforcement of the requirements, consistent with Public Resources Code section 25532. The project owner shall pay the annual waste discharge permit fee associated with this facility to the Water Boards. The project owner shall make payments to the State Water Resources Control Board, based upon a fee schedule in California Code of Regulations, Title 23, section 2200 for a Discharge to Land with a Threat to Water Quality Rating of 2 and Complexity Rating of C.

Verification: At least sixty (60) days prior to construction, the project owner shall submit to LRWQCB all necessary information and applicable fees, submitting copies of all application submittals to the CPM. At least thirty (30) days prior to construction of the Gen-tie line, the project owner shall submit to the CPM and LRWQCB for review and approval all plans to control the potential **impacts to ephemeral streams from fill and excavation activities** ~~for fill and excavation discharges of wastewater~~ associated with construction of the Gen-tie line. Within ten (10) days of its mailing or receipt, the project owner shall submit to the CPM any correspondence with the SWRCB or the LRWQCB regarding ~~discharge of wastewater associated with~~ this activity. The project owner shall notify the CPM in writing of any violations and include these in the annual compliance report. Any monitoring documentation associated with the SWRCB Order shall be included in the annual compliance report. Any monitoring documentation associated with the SWRCB Order **WDR** shall **also** be included in the annual compliance report.

WATER-3 **OFFSITE WASTEWATER DISPOSAL**. The project owner proposes that industrial related wastewater would be contained in tanks and periodically disposed off-site by a third party vendor during project operation (CLEG 2025). If the project owner does not elect to treat sanitary wastewater using an onsite leach-line septic system, this wastewater shall also be disposed offsite. To verify operational wastewater streams are to be disposed in accordance with Federal, State and local regulations, the project owner shall document all aspects of offsite wastewater disposal.

Verification: No later than 30 days prior to project operation, the project owner shall provide a copy of the service agreement with the vendor selected for offsite industrial wastewater disposal, and/or sanitary wastewater disposal if applicable. Within ten (10) days of offsite shipment, the project owner shall submit to the CPM any non-hazardous manifest, bill-of-lading, or any other shipping documentation associated with offsite wastewater disposal. Within ten (10) days of its mailing or receipt, the project owner shall submit to the CPM any correspondence with the third party offsite wastewater disposal vendor, and any agencies or interested parties regarding offsite wastewater disposal. The project owner shall notify the CPM in writing of any violations and include these in the annual compliance report. The project owner shall include all offsite wastewater disposal shipping documentation in the annual compliance report.

WATER-4 **ONSITE SEPTIC SYSTEM PERMIT REQUIREMENTS**. If the project owner elects to treat sanitary wastewater using an onsite leach-line septic system, an on-site septic system designed for site-specific soil and percolation conditions shall be installed. The septic system design shall comply with the SWRCB's onsite wastewater treatment system (OWTS) policy (SWRCB 2023) and Kern County Environmental Health Division (KCEPH) OWTS ordinance Chapter 8.62. The project owner shall operate the septic system following an operations and maintenance manual prepared by a qualified professional. If the site conditions are unfavorable to support a conventional leach field system, the project owner shall work with the KCEPH and the CPM to evaluate a viable alternative.

Verification: No later than 90 days prior to project operation, the project owner shall submit to the CPM evidence that that the septic system design has been reviewed by the KCEPH and the approval of the chief building official (CBO). No later than 60 days prior to project operation, the project owner shall submit the operations and maintenance manual to the KCEPH for review and comment. No later than 30 days prior to project operation, the project owner shall submit the operations and maintenance manual to the CPM for review and approval. The submittal shall include copies of any agency comments the project owner has received. The wastewater system shall be monitored following either the general standards adopted in SWRCB's OWTS regulations or the procedures outlined in the CPM-approved operations and maintenance manual. Any testing results or correspondence exchanged between the project owner and the KCEPH, or any other state or local agency, during operations shall be provided to the CPM in the annual compliance report.

WATER-5 **JURISDICTIONAL DAM CONSTRUCTION REQUIREMENTS**. The **Commission has determined that the** outer embankment of the hydrostatic compensation reservoir (HC-reservoir) meets the definition of a

jurisdictional dam per California Water Code (CWC) Sections 6002 and 6003. Therefore, the HC-reservoir embankment is subject to the review and approval of all design and specifications **that would be administered** by the Department of Water Resources, Division of Safety of Dams (DWR-DSOD) The **Commission has determined that the** project owner is an "owner" under Water Code section 6005.

As it relates to this project (HC-reservoir embankment), the project owner shall comply with the requirements set forth in Division 3, Part 1 of the Water Code and California Code of Regulations, Title 23, Division 2, Chapter 1 (collectively referred to as "Dam Safety Program Requirements") and any design specifications directed by DWR-DSOD which will administer the Dam Safety Program Requirements on behalf of the CEC. The Project Owner shall comply with any future changes to **applicable** statute or regulations of the Dam Safety Program Requirements.

To facilitate the project and project owner's compliance with the Dam Safety Program Requirements, the following requirements are identified. These Dam Safety Program Requirements are identified to provide information and do not limit or otherwise impact the project and project owner's obligation to comply with all Dam Safety Program Requirements.

- Construction, enlargement, alteration, repair, modification, and removal of dams and reservoirs are subject to the requirements in Division 3, Part 1, Chapter 5 of the California Water Code and California Code of Regulations, Title 23, Division 2, Chapter 1.

- Construction inspection requirements, final approval, and post-construction documentation requirements are set forth in Division 3, Part 1, Chapter 7 of the California Water Code.

- The project owner shall not, through action or inaction, impound water in the Project's dam or reservoir until **the CPM and** DWR-DSOD ~~has~~ **have determined that the dam or reservoir is safe to impound water consistent with** ~~issued~~ a certificate of approval, as provided in Water Code section 6355.

- The project owner shall pay application and annual fees, in accordance with the Dam Safety Program Requirements **to facilitate the DWR-DSOD's ability to perform design review, construction monitoring, safety inspections and other work associated with the construction and operations of the dam. In lieu of the application fee, the applicant can negotiate a**

different fee structure or other reimbursement mechanism with DWR-DSOD.

- This project and project owner shall be subject to the requirements in Water Code section 6102.5, which addresses periodic inspections, and dam owner obligations to perform maintenance, provide information, and fully operate any critical outlet and spillway control features as determined by DWR-DSOD **and approved by the CPM**.

- The project and project owner shall comply with the inundation map and emergency action plan requirements as provided in Division 3, Part 1, Chapter 4, Article 6 of the California Water Code and California Code of Regulations, Title 23, Division 2, Chapter 1.

- The project and project owner shall be subject to the enforcement **by the Commission and DWR-DSOD for compliance with the** provisions set forth in Division 3, Part 1, Chapter 8 of the California Water Code and California Code of Regulations, Title 23, Division 2, Chapter 1. ~~The CEC also retains its enforcement authority over this component of the project~~.

The project owner shall obtain **Commission approval in consultation with DWR-**DSOD approval of dam plans and specifications prior to commencing construction of the HC-reservoir in accordance with CWC Section 6200. The project owner shall provide the **Commission in consultation with DWR**-DSOD with information to achieve the following milestones of the design approval process:

~~1. Application for construction of a dam and filing fee (per CWC section 6300), and geology/geotechnical reports and data.~~

~~2.~~ **1.** ~~Additional~~ **Project information,** geology/geotechnical reports and **other project related** data ~~if data gaps or concerns are~~ identified by **the CPM in consultation with DWR-**DSOD staff.

~~3.~~ **2**. Design report, criteria and guidelines for dam, spillway, and emergency outlet.

~~4.~~ **3.** 30% Design plans/concept.

5. **4**. 60% Design plans/specifications.

6. **5.** 90% Design plans/specifications.

7. **6**. 100% Design plans/specifications and draft inundation map.

Following the conclusion of milestone ~~7~~ **6**, **the CPM in consultation with DWR-**DSOD would approve the design application and conditions of the HC-reservoir, ~~with CPM concurrence~~, after all CWC provisions and applicable engineering standards have been demonstrated.

Construction of the HC-reservoir embankment will commence within one year of **CPM Approval in consultation with DWR-**DSOD approval (~~CWC Section 6265~~).

The inundation map approved by the **Commission in consultation with DWR-**DSOD ~~and the CPM~~, would be included with a draft emergency action plan (EAP) submitted to the California Office of Emergency Services (CalOES) prior to the reservoir being certified.

Any change to the design, construction, or operation of the HC-reservoir embankment shall be requested by the project owner in writing to the CPM for approval, in consultation with the **DWR**-DSOD, prior to the initiation of any construction and/or operation changes. Such changes may be approved by the CPM after consultation with the **DWR**-DSOD if the changes do not result in a new significant impact.

Consistent with ~~DSOD's~~ existing statutory and regulatory enforcement authority regarding the design, construction, and operations of the HC-reservoir embankment, the ~~DSOD and~~ CEC **and DWR-DSOD** will confer with each other and coordinate, as needed, in the enforcement of the requirements.

Verification: Any documents submitted to the DSOD including but not limited to application materials, geotechnical reports, design drawings, pictures, soil studies, or hazards analysis, shall be provided contemporaneously to the CPM **and DWR-DSOD** for review.

~~Documents, including notices of violation or other documents issued by the DSOD to comply with the Dam Safety Program Requirements, shall be provided to CPM.~~

The project owner shall provide evidence to the CPM of payment to DWR-DSOD of all fees required under the Dam Safety Program Requirements within 10 days of payment **or the funding agreement executed between the project owner and DWR-DSOD.**.

WATER-6 The CEC delegates **compliance and design verification for** the dam safety related construction inspection of the HC-reservoir embankment and related dam safety components approved by the **Commission** ~~DSOD~~, to the

DWR- DSOD, with onsite consultation with the DCBO and ongoing guidance from the CPM.

The DCBO shall have regulatory oversight responsibility of the entire project ~~but shall defer regulatory oversight of~~ **Compliance and design verification for** the hydrostatic compensation reservoir system **is delegated** to the **DWR-**DSOD inspection team **with guidance from the CPM, who will be communicating approvals to the project owner.**

Before submitting the initial engineering designs for HC-reservoir for DCBO review, the project owner shall furnish the CPM, DCBO and the DSOD with a schedule of design submittals, 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. The schedule shall contain the date of each submittal to the DSOD and the DCBO.

To facilitate audits by CEC staff, the project owner shall provide specific packages as described in the paragraph above to the CPM upon request.

During project operations, the project owner shall allow and facilitate DSOD regular inspections of the HC-reservoir embankment.

Verification: Once DSOD has approved the project owner's new dam construction application, the project owner shall provide the schedule to the DSOD, DCBO and CPM at least 60 days (or a project owner, DCBO and DSOD mutually agreed upon alternative time frame) prior to the start of construction of the HC-reservoir.

These documents shall be the pertinent design documents for the major structures, systems, and equipment defined above in Condition of Certification WATER-6.

Major structures and equipment shall not be added to or deleted from the list without CPM and DSOD approval. The project owner shall provide schedule updates in the monthly compliance report (MCR).

Upon completion of the HC-reservoir embankment construction, the project owner shall request the DSOD to issue a certificate of approval for the HC-reservoir embankment to impound water with CPM concurrence.

Filling of the HC-reservoir shall not commence until the DSOD has issued a certificate of approval that the HC-reservoir is suitable to impound water (CWC Section 6355).

The project owner shall submit all correspondence and results of DSOD regular inspections during project operations.

WATER-7 **WATER USE AND REPORTING.** Supply of fresh water for the project construction shall be provided by the Antelope Valley-East Kern Water Agency (AVEK). The project owner shall enter into a water agreement with AVEK. ~~Annual water use during project construction shall be limited to 350 AFY and t~~ **T**otal water use during the 5-year construction period shall not exceed 1,400 acre-feet (AF). Project operation water use shall not exceed 4 acre-feet per year (AFY). The project owner shall record daily water use for the project's construction and operation. The project owner shall comply with the water use limits and reporting requirements described below.

Verification: Within ten (10) days of its mailing or receipt, the project owner shall submit to the CPM any correspondence with the AVEK concerning construction and operations water supply. This shall include the water agreement with AVEK. During project construction, the MCR shall include a summary of monthly water use. The project's annual compliance report shall include a monthly and annual summary of water use identifying construction or operations and water source.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
PUBLIC BENEFITS CONDITIONS OF CERTIFICATION

PB-1 The project owner shall work with the County to determine how the use of sales and use taxes from the construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project owner obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization. As an alternative to the aforementioned process, the project owner may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project owner shall allow the County to use this sales tax information publicly for reporting purposes.

Verification: At least 30 days prior to the start of construction, the project owner shall submit a letter to the CEC's Compliance Project Manager detailing the agreement with Kern County on the use of sales and taxes from project construction or proof of payment of the equivalent amount of sales and use taxes was paid to Kern County.

WILLOW ROCK ENERGY STORAGE CENTER (21-AFC-02)
COMPLIANCE CONDITIONS AND COMPLIANCE MONITORING PLAN
CONDITIONS OF CERTIFICATION

COM-1 **Unrestricted Access.** The project owner shall take all steps necessary to ensure that the CPM, responsible CEC staff, and delegate agencies or consultants have unrestricted access to the facility site, related facilities, project-related staff, and the records maintained on site for the purpose of conducting audits, surveys, inspections, or general or closure-related site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time, whether such visits are by the CPM in person or through representatives from CEC staff, delegated agencies, or consultants.

COM-2 **Compliance Record.** The project owner shall maintain electronic copies of all project files and submittals related to the CEC license 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 Supplemental AFC;

2. all amendment petitions and CEC 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 COCs or applicable LORS.

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

COM-3 **Compliance Verification Submittals.** Verification lead times associated with the start of construction may require the project owner to file submittals during the certification 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 or cover email 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 COC 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 COCs applicable.

All reports and plans required by the project's COCs 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 and that the actions required by the verification were satisfied by the project owner or an agent of the project owner. All submittals shall be submitted electronically by email.

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

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

1. the project owner has submitted the pre-construction matrix and all compliance verifications pertaining to pre-construction COCs; and

2. the CPM has issued an authorization-to-construct letter to the project owner.

The deadlines for submitting various compliance verifications to the CPM allow staff sufficient time to review and comment on, and, if necessary, also allow the project owner to revise the submittal in a timely manner. These

procedures help ensure that project construction proceeds according to schedule. Failure to submit required compliance documents by the specified deadlines may result in delayed authorizations to commence various stages of the project.

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

COM-5 **Compliance Matrix.** The project owner shall submit a compliance matrix to the CPM with each MCR and ACR. The compliance matrix shall identify:

1. the technical area (e.g., biological resources, facility design, etc.);

2. the condition number;

3. brief description of the verification action or submittal required by the COC;

4. the date the submittal is required (e.g., 60 days prior to construction, after final inspection, etc.);

5. the expected or actual submittal date;

6. the date a submittal or action was approved by the Delegate Chief Building Official (DCBO), CPM, or delegate agency, if applicable;

7. the compliance status of each condition (e.g., "not started," "in progress" or "completed" (include the date)); and

8. if the COC was amended, the updated language and the date the amendment was proposed or approved.

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

COM-6 Monthly Compliance Report. The first MCR is due 30 days following the filing to the docket of the Decision unless otherwise agreed to by the CPM. The first MCR shall include the AFC number and an initial list of dates for each of

the events identified on the Key Events List. (The Key Events List form is found at the end of this **Compliance Conditions and Compliance Monitoring Plan** section.) During pre-construction, construction, or closure, the project owner or authorized agent shall submit an electronic searchable version of the MCR to the CPM within 10 business days after the end of each reporting month.

MCRs shall be submitted each month until construction is complete, and the final certificate of occupancy is issued by the DCBO. MCRs shall be clearly identified for the month being reported. The MCR shall contain, at a minimum:

1. a summary of the current project construction status, a revised/updated schedule if there are significant delays, and an explanation of any significant changes to the schedule;

2. documents required by specific COCs to be submitted along with the MCR. Each of these items shall be identified in the transmittal letter, as well as the conditions they satisfy, and submitted as attachments to the MCR;

3. an initial, and thereafter updated, compliance matrix showing the status of all COCs;

4. a list of COCs 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 COCs;

7. a 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 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 COCs;

9. a listing of the month's additions to the on-site compliance file; and

10. a listing of incidents, complaints, notices of violation, official warnings, and citations received during the month; a list of any incidents that occurred during the month, a description of the actions taken to

date to resolve the issues; and the status of any unresolved actions noted in the previous MCRs.

COM-7 **Kern County Notification of Key Events.** The Kern County Planning and Natural Resources Department shall be provided contact information including cell phone, office numbers and e-mails for the Project Owner's Representatives(s) and the CEC Compliance Project Manager (CPM).

The Kern County Planning and Natural Resources Department, Kern County Fire Department, and Kern County Public Works Department shall all be notified by e-mail for the following milestones:

a. Commencement of any road construction

b. Moving equipment for grading onto the site

c. Beginning of any blasting or excavation

d. Filling of the retention pond

e. Completion of excavation

f. Completion of facilities

COM-8 **Periodic and Annual Compliance Reports.** After construction is complete, the project must submit searchable electronic ACRs to the CPM, as well as other periodic compliance reports (PCRs) required by the various technical disciplines. ACRs shall be completed for each year of commercial operation and are due each year on a date agreed to by the CPM. Other PCRs (e.g. quarterly reports, etc. to monitor closure compliance), may be specified by the CPM. The searchable electronic copies may be filed on an electronic storage medium or by e-mail, subject to CPM approval. Each ACR must include the AFC number, identify the reporting period, and contain the following:

1. an updated compliance matrix which shows the status of all COCs (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 COCs to be submitted along with the ACR; each of these items shall be identified in the transmittal letter with the COCs it satisfies, and submitted as an attachment to the ACR;

4. a cumulative list of all post-certification changes approved by the CEC or the CPM;

5. an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided;

6. a listing of filings submitted to, or permits issued by, other governmental agencies during the year;

7. a projection of project compliance activities scheduled during the next year;

8. a listing of the year's additions to the on-site compliance file;

9. an evaluation of the Site Contingency Plan, including amendments and plan updates; and

10. a listing of complaints, incidents, notices of violation, official warnings, and citations received during the year, a description of how the issues were resolved, and the status of any unresolved complaints.

COM-9 **Confidential Information.** Any information that the project owner designates as confidential shall be submitted to the CEC's Executive Director with an application for confidentiality, pursuant to Title 20, California Code of Regulations, section 2505(a). Any information deemed confidential pursuant to the regulations will remain undisclosed, as provided in Title 20, California Code of Regulations, section 2501 et seq.

COM-10 **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 CEC'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 CEC dockets its Decision. All subsequent payments are due by July 1 of each year in which the facility retains its certification.

COM-11 **Amendments, Staff-Approved Project Modifications, Ownership/Operational Control Changes, Staff and Project Owner Jointly Initiated Amendments and Verification Changes.** The project owner shall petition the CEC, 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 a CEC Decision. In reviewing a petition to modify the project, the CEC may require the project owner provide additional information, including responses to categories in title 20, Appendix B, relevant to the project change.

A project owner is required to submit a $5,000 fee for every petition to amend a previously certified facility, pursuant to Public Resources Code section 25806 (e). If the

actual amendment processing costs exceed $5,000, the total PTA reimbursement fees owed by a project owner will not exceed the AFC cap of $1,068,853, adjusted annually.

Staff and Project Owner Jointly Initiated Amendments, and Verification Changes, are exempt from 25806(e) and, therefore, do not require a filing fee.

COM-12 **Reporting of Complaints, Notices, and Citations.** Prior to the start of construction or closure, the project owner shall send a letter to property owners within one mile of the project, notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it must include automatic answering with date and time stamp recording.

The project owner shall respond to all recorded complaints within 24 hours or the next business day. The project owner shall post the telephone number onsite and make it easily visible to passersby during construction, operation, and closure. The project owner shall provide the contact information to the CPM and promptly report any disruption to the contact system or telephone number change to the CPM, who will provide it to any persons contacting him or her with a complaint.

Within five business days of receipt, the project owner shall report, and provide copies to the CPM, all complaints, including, but not limited to, noise and lighting complaints, notices of violation, notices of fines, official warnings, and citations. Complaints shall be logged and numbered. Noise complaints shall be recorded on the form provided in the Noise and Vibration conditions of certification. All other complaints shall be recorded on the complaint form at the end of this compliance plan. Additionally, the project owner must include in the next MCR, ACR or PCR, copies of all complaints, notices, warnings, citations and fines, a description of how the issues were resolved, and the status of any unresolved or ongoing matters.

COM-13 **Emergency Response Site Contingency Plan.** No less than 60 days prior to the start of construction (or other CPM-approved) date, the project owner shall submit, for CPM review and approval, an Emergency Response Site Contingency Plan (Contingency Plan). Subsequently, no less than 60 days prior to the start of commercial operation, the project owner shall update (as necessary) and resubmit the Contingency Plan for CPM review and approval. The Contingency Plan shall evidence a facility's coordinated emergency response and recovery preparedness for a series of reasonably foreseeable emergency events. The CPM may require Contingency Plan updating over the life of the facility. Contingency Plan elements include, but are not limited to:

1. a site-specific list and direct contact information for persons, agencies, and responders to be notified for an unanticipated event;

2. a detailed and labeled facility map, including all fences and gates, the windsock location (if applicable), the on and off-site assembly areas, and the main roads and highways near the site;

3. a detailed and labeled map of population centers, sensitive receptors, and the nearest emergency response facilities;

4. a description of the on-site, first response and backup emergency alert and communication systems, site-specific emergency response protocols, and procedures for maintaining the facility's contingency response capabilities, including a detailed map of interior and exterior evacuation routes, and the planned location(s) of all permanent safety equipment;

5. an organizational chart including the name, contact information, and first aid/emergency response certification(s) and renewal date(s) for all personnel regularly on-site;

6. a brief description of reasonably foreseeable, site-specific incidents and accident sequences (on- and off-site), including response procedures and protocols and site security measures to maintain twenty-four-hour site security;

7. procedures for maintaining contingency response capabilities; and

8. the procedures and implementation sequence for the safe and secure shutdown of all non-critical equipment and removal of hazardous materials and waste (see also specific conditions of certification for the technical areas of **Public Health, Waste Management, Hazards,**

Hazardous Materials Management, and Wildfire and Worker Safety and Fire Protection).

COM-14 Incident-Reporting Requirements. The project owner shall notify the CPM within one hour after it is safe and feasible, of any incident at the facility that results 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;

3. Any chemical, gas or hazardous materials release that could result in potential health impacts to the surrounding population; or create an offsite odor issue; and

4. Notification to, or response by, any off-site emergency response federal, state or local agency regarding a fire, hazardous materials release, onsite injury, or any physical or cyber security incident.

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 Hazards, Hazardous Materials Management and Wildfire and Waste Management).

Within six business days of the incident, the project owner shall submit to the CPM a detailed incident report that includes, as applicable, 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 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.

After the submittal of the initial report for any incident, the project owner shall submit to the CPM copies of incident reports within 48 hours of a request. The project owner shall maintain all incident report records for the life of the project, including closure.

If the project owner requests that an incident notification or report be designated as a confidential record and not publicly disclosed, the project owner shall submit copies of notices or reports with an application for confidential designation in accordance with CEC regulations.

COM-15 Non-Operation and Repair/Restoration Plans.

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

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

1. Identification of operational and non-operational components of the plant;

2. A detailed description of the repair and inspection or restoration activities;

3. A proposed schedule for completing the repair and inspection or restoration activities;

4. An assessment of whether the proposed activities would require changing, adding, and/or deleting any COCs, 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 COCs and LORS.

b. Written monthly updates (or other CPM-approved intervals) to the CPM for non-operational periods, until operation resumes, shall include:

1. Progress relative to the schedule;

2. Developments that delayed or advanced progress or that may delay or advance future progress;

3. Any public, agency, or media comments or complaints; and

4. Projected date for the resumption of operation.

c. During non-operation, all applicable COCs and reporting requirements remain in effect. If, after one year from the date of the project owner's last report of productive repair/restoration plan work, the facility does not resume operation or does not provide a plan to resume operation, the Executive Director may assign suspended status to the facility and recommend commencement of permanent closure activities. Within 90 days of the Executive Director's determination, the project owner shall do one of the following:

1. If the facility has a closure plan, the project owner shall update it and submit it for CEC review and approval; or

2. If the facility does not have a closure plan, the project owner shall develop one consistent with the requirements in this Compliance Plan and submit it for CEC review and approval.

COM-16 Facility Closure Planning. To ensure that a facility's eventual permanent closure and maintenance do not pose a threat to public health and safety

and/or to environmental quality, the project owner shall coordinate with the CEC to plan and prepare for eventual permanent closure.

Final Closure Plan

a. No less than one year (or other CPM-approved date) prior to initiating a permanent facility closure, or upon an order compelling permanent closure, the project owner shall submit for CEC review and approval a Final Closure Plan, which includes any site maintenance and monitoring.

Prior to submittal of the facility's Final Closure Plan to the CEC, the project owner and the CPM may hold a meeting to discuss the specific contents of the plan.

b. Final Closure Plan 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 CEC 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 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 schedule projecting all phases of closure activities for the power plant site and all appurtenances constructed as part of the CEC-certified project;

6. an electronic submittal package of all relevant plans, drawings, risk assessments, and maintenance schedules and/or reports, including an above and below-ground infrastructure inventory map and registered engineer's or DCBO's assessment of demolishing the facility;

7. additionally, for any facility that permanently ceased operation prior to submitting a Final Closure Plan 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 COCs applicable to plant closure;

9. an equipment disposition plan, including:

   a. recycling and disposal methods for equipment and materials; and

   b. identification and justification for any equipment and materials that will remain on-site after closure.

10. a site disposition plan, including but not limited to proposed rehabilitation, restoration, and/or remediation procedures, as required by the conditions of certification and applicable LORS, and site maintenance activities;

11. identification and assessment of all potential direct, indirect, and cumulative impacts and proposal of mitigation measures to reduce significant adverse impacts to a less-than-significant level. Potential impacts to be considered shall include, but not be limited to:

   a. traffic;

   b. noise and vibration;

   c. soil erosion;

   d. air quality degradation;

   e. solid waste;

   f. hazardous materials;

g. waste water discharges; and

h. contaminated soil;

12. identification of all current conditions of certification, LORS, federal, state, regional, and local planning efforts applicable to the facility, and

13. proposed strategies for achieving and maintaining compliance during closure; and

14. updated mailing list and Listserv of all responsible agencies, potentially interested parties, and property owners within one mile of the facility.

15. description of and schedule for security measures and safe shutdown of all non-critical equipment and removal of hazardous materials and waste (see COCs Public Health, Waste Management, Hazards, Hazardous Materials Management, and Wildfire and Worker Safety and Fire Protection).

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