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REPORT

Preliminary Staff Assessment Comments

Willow Rock Energy Storage Center (21-AFC-02)

Submitted by:

GEM A-CAES LLC

Submitted by:

WSP USA Inc.

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June 2025

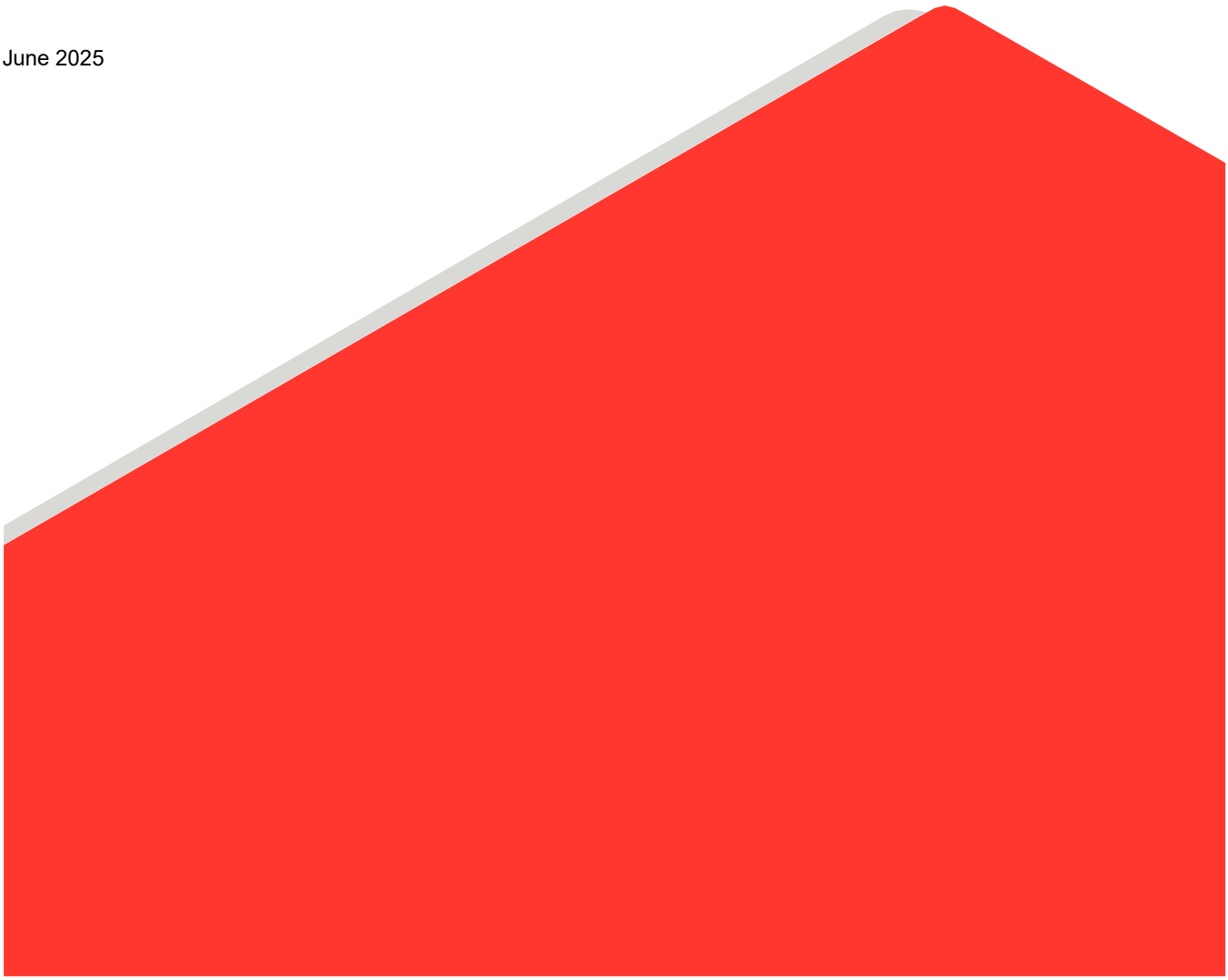


Table of Contents

APPENDICES

1.0 INTRODUCTION

This document provides initial comments from GEM A-CAES, LLC (GEM; the Applicant) on the Preliminary Staff Assessment (PSA) for the Willow Rock Energy Storage Center Project (WRESC or Project) Supplemental Application for Certification (AFC) (21-AFC-02). The Applicant is submitting these comments to address the WRESC PSA and to respond to some of the comments made at the Preliminary Staff Assessment Technical and Mitigation Workshops held on June 5th and June 10th, 2025.

2.0 GLOBAL COMMENTS

While the Applicant has endeavored to identify each instance that requires correction, these are global changes that should be made prior to publication of the Final Staff Assessment:

- Remove multiple references to “forthcoming PSA”.
- To comport with the terminology to be used by WRESC construction teams involved in these twice daily, subterranean activities, please replace the terms “blast” and “blasting” with “controlled detonations”; and please replace “Blasting Plan” with “Controlled Detonations Plan” throughout the PSA text and the Conditions of Certification.

3.0 EXECUTIVE SUMMARY, INTRODUCTION, AND PROJECT DESCRIPTION

3.1 Executive Summary

Page 1-2 - Last line of the page - should state A zone, not A-1 (Exclusive Agriculture is correct - but the designation is A). Please revise text as follows:

> “The project as presently proposed would be on undeveloped land in an area zoned Exclusive Agriculture ~~(A-1)~~ **A** District”.

Page 1-8 - The Applicant appreciates the excellent interactions with Staff at the PSA workshop on Visual Resources issues. Per those public discussions, the Applicant is providing additional information, analyses, and photo simulations. As discussed at the PSA Workshop and in these comments on the Visual Resource section, the Applicant believes that implementation of mitigation measures outlined in Condition of Certification (COC) VIS-1 will reduce the visual impact of the project to less than significant. As a result of these public discussions and the additional information provided by the Applicant, the record supports the conclusion that the potential impacts have been mitigated to a level of less than significant.

3.2 Introduction

No comments or suggestions regarding Introduction section of the PSA.

3.2.1 Project Description

Page 3-2 - There is only one stormwater pond. Please revise text as follows:

> “…Site stormwater drainage system and stormwater percolation/evaporation ~~ponds~~ **pond”**.

Page 3-2 - Please consider that there are two fire pumps, one primary that is electric motor driven. The diesel engine is secondary (emergency). The seventh bullet under " Operation and Maintenance Facilities, Ancillary Support Systems, and Other Features" should read:

> **"One primary all-electric and one secondary diesel-fired 345-kilowatt (kW) (460 horsepower) emergency fire pump".**

Page 3-3 - The designation for Exclusive Agriculture is incorrectly shown as A-1 instead of A. Please revise text as follows:

> "The new project site is on undeveloped land in an area zoned Exclusive Agriculture ~~(A-1)~~ **(A)** District".

Page 3-8 – WRESC is not a 112-acre site. Please clarify that the WRESC site is an 88.6-acre site which is a portion of a 112-acre parcel. Please revise text as follows:

> "The approximately ~~112~~**88.6**-acre undeveloped WRESC site **(the eastern portion of the 112-acre parcel bisected by the Sierra Highway)** is bounded on the north and west by vacant, undeveloped property, on the east by Sierra Highway, and on the south by Dawn Road. **The portion of the 112-acre parcel that lies east of Sierra Highway will remain undeveloped.** Additional parcels adjacent to the WRESC site on the north and west sides may be used for project activities including temporary parking, construction laydown, and the possible construction of an architectural berm. The area surrounding the project site is mostly undeveloped, with a few sparsely scattered residences, the closest one being approximately 0.8 miles northwest of the WRESC site".

Page 3-10 – Please revise text as follows:

> "The system stores compressed air in a purpose-built underground storage cavern, analogous to those used worldwide for hydrocarbon storage **or the salt caverns used by traditional compressed air energy storage technologies elsewhere nationally and internationally.** The **WRESC** storage cavern is filled with water through a hydraulic conduit from a water storage compensation reservoir at the ground surface level. The ~~weight of the water~~ **hydrostatic pressure from the water** in this compensation reservoir **and the associated water shaft** maintains a near-constant air pressure in the cavern throughout both the charging and discharging cycles, supporting efficient operation, and significantly reducing the cavern volume requirements".

Page 3-15 – It is suggested to refer to turbine generators as "air-expansion turbine generators". Please revise the text as follows:

> "All **air-expansion** turbine generators would be single-casing axial-bladed machines with multiple air inlets and outlets, driving a synchronous generator, and would be complete with power-generation-industry-quality speed/load controls, generator-protective relaying, voltage regulators, and synchronizing equipment. Each unit would have a dedicated lubricating/control oil system, a dedicated turbine and generator control, and protection systems".

4.0 ENGINEERING EVALUATION

4.1 Facility Design

Page 4.1-2 - COC GEO-2 is regarding the final design and construction of underground openings shall be in accordance with applicable laws, ordinances, regulations, and standards (LORS). However, GEO-3 is integrity

inspections of underground structures. Therefore, rather than GEO-3, GEO-2 would ensure vertical shafts and caverns are designed to withstand seismicity. Please revise text as follows:

> "As explained in Section 4.1, Facility Reliability and Section 5.6, Geology, Paleontology, and Minerals, geotechnical evaluation of the cavern found that the bedrock is expected to be seismically stable (ESHD 2024i). Literature evaluating the seismic stability of caverns supports the conclusion that deep underground openings are seismically stable, if the rupturing fault does not intersect the opening which is the case for WRESC. The cavern and air and water shafts would be constructed following implementation of civil and structural design criteria provided in Table 4.1-1. Also, COC **GEO-2** ~~GEO-3~~ (in Section 5.6, Geology, Paleontology, and Minerals) would ensure the vertical shafts and cavern are designed and constructed to withstand seismicity and that the construction of underground openings will follow engineering codes and professional standards (as listed in Appendix 2A) for construction of underground structures (ESHD 2024o)".

Page 4.1-6, COC GEN-1, Verification – Please consider that notifying 30 days in advance of any repair may not be possible. Also, please clarify who will determine what needs to be approved by the delegate chief building official (DCBO). For revisions to the conditions refer to Appendix A.

Page 4.1-18, 4.1-19 – COC ELEC-1 incorrectly reports a voltage of 13.1 kV. Please change the voltage to 13.8 kV in A.1 and B.5 of the condition as noted below and in Appendix A.

> "ELEC-1
>
> A. Final plant design plans shall include:
> 1. one-line diagram for the ~~13.1~~**13.8** kV, 4.16 kV and 480 V systems;
> .....
> 5. coordination study calculations for fuses, circuit breakers and protective relay settings for the ~~13.1~~**13.8** kV, 4.16 kV and 110/480 V systems".

4.2 Facility Reliability

Page 4.2-4 – The reference to Fresno County's Mult-Jurisdiction Hazard Plan is incorrect. Please change to Kern County Plan or delete reference.

> "CEC staff has proposed COCs to ensure the project complies with ~~Fresno~~**Kern** County's Mult-Jurisdiction Hazard Plan for subsidence. See Section 5.16, Water Resources, ~~in the forthcoming complete PSA~~ for further discussion. Therefore, subsidence would have a less than significant impact on reliability"."

4.3 Transmission System Engineering

The Applicant has updated its one-line diagram to reflect the current engineering design. The updated diagram is included as Appendix B. Please revise the Staff Assessment accordingly.

Page 4.3-4 – Please note that, due to line crossings, the above-ground height of poles will range from 60 to 140 feet. Also, as a result of micro-siting to maximize avoidance of resources, span lengths are expected to range from 200 to 800 feet. Moreover, based on the most recent engineering design, the

transformers that would be used are rated at 105/140/175 MVA as opposed to 96/128/160 (refer to Appendix B of this report). Please revise the text as follows:

> "The WRESC electrical power would be generated using four triple pressure condensing turbine/generator trains with four air-powered turbine generators. Power would be stepped up to 230 kV by generator step-up (13.8/230 kV) transformers rated at ~~96/128/160~~ **105/140/175** MVA.
>
> The project would include a 230 kV substation and power distribution center and an approximately 19-mile-long, 230 kV single-circuit double-bundle conductor overhead generator tie-line (gen-tie) and underground line segments.
>
> The gen-tie line would be supported by **60 to 140**~~90~~ feet high steel poles with a span of approximately ~~600~~**200** to ~~900~~**800** feet. The underground segment would cross the Los Angeles Department of Water and Power (LADWP) high voltage transmission corridor and in other locations where the transmission corridor is congested with existing facilities. The underground line segment would be constructed with an underground cable which runs through a continuous underground duct bank.
>
> The project substation is shown in Figure 1-1 of the WRESC Supplemental Application for Certification. For each train, low sides of the three winding 13.8-230 kV transformer rated at ~~96/128/160~~ **105/140/175** MVA would tie into the 13.8 kV buses via a dedicated 4000 Ampere (A) breaker. High side of each train transformer would connect with the high side of the generator 13.8/230 kV step-up transformer rated at ~~96/128/160~~ **105/140/175** MVA via a common bus. The 13.8 kV generator rated at 152.9 MVA with power factor of 0.85 would be connected to the generator step-up transformer via a disconnect switch and a breaker through a 7000 A, 13.8 kV isolated phase busduct. The same common bus would tie into the substation via each train's motor operated 230 kV disconnect switch and a breaker rated at 2000 A."
>
> A 230 kV generator tie-line would connect to the project's common tubular bus bar where the project's four trains connect to the SCE Whirlwind Substation via an approximately 19-mile-long gen-tie line. The Whirlwind Substation would need to install a new 230 kV switchrack position to terminate the new gen-tie line. Power would be delivered to the SCE transmission system from the Whirlwind Substation (ESHD 2024i: TN 254806, WSP 2024aa: TN 259675)".

Page 4.3-8, Power Factor Evaluation Results - In accordance with CAISO requirements, synchronous generators must operate between a power factor of 0.9 lagging and 0.95 leading at the generator terminals. The proposed generator for Willow Rock is designed to operate within a range of 0.85 lagging to 0.95 leading. The proposed equipment easily meets the LGIA requirement of 0.95 power factor at Whirlwind during discharge without the need for additional machinery. During charging, we will be approaching a power factor of 1.0. Please remove the following text:

> "~~The WRESC would not meet the 0.95 power factor requirement. Additional synchronous generator to provide reactive power would need to be installed to address the reactive power deficiencies~~".

Page 4.3-9 – Please revise text as follows:

> "Short Circuit studies were conducted to determine the degree to which the addition of the projects in SCE's queue, including the proposed WRESC project, and all necessary transmission upgrades increases fault duties at SCE's substations, adjacent utility substations, and other 230 kV and 500 kV busses within the study area.

The study indicated the WRESC would contribute to **short circuit duty issues and be responsible for funding its share of the following short circuit duty mitigation**~~: overstressing the following circuit breakers. WRESC would be responsible for upgrading these circuit breakers.~~

- Pardee ~~220 kV Substation circuit breakers~~ **short circuit duty mitigation as identified and included in the executed LGIA**.

The following are Conditionally Assigned Network Upgrades (CANUs) which are not currently the cost responsibility of the WRESC but could become the responsibility of the project at a later date with WRESC funding its share of the Network Upgrade:

- Midway Substation 500 kV circuit breakers CB 712, CB 722, CB 822 (California ISO 2022: TN 256825).
- The Vincent 500 kV Substation short circuit duty upgrade would still be needed, however the Vincent 500 kV SCD mitigation was recently identified in SCE's 2021 Annual Transmission Reliability Assessment and as such, conditionally assigned Network upgrade are no longer applicable to WRESC (California ISO 2022: TN 56825)".

Page 4.3-11, COC TSE-1, Verification - Suggest the start of construction be modified to language used in condition (TLSN-1) "Prior to the start of construction of the transmission lines or related structures and facilities..." to clarify overall project construction. For revisions to conditions refer to Appendix A.

Page 4.3-13, COC TSE-4, item a – Please confirm that Table 1 is the correct list of "major electrical equipment". Please revise text as follows:

"… Receipt or delay of major electrical equipment (**Table 1 of TSE-1)**;"

Page 4.3-13, COC TSE-5 – Please modify language with minor clarifications set forth in Appendix A.

Page 4.3-15, COC TSE-6: Please revise to change 60 days to 90 days as set forth in Appendix A,

4.4 Worker Safety and Fire Protection

Page 4.4-8 – Please change all references to "blasting" and "explosions" to "controlled detonations". These are precisely controlled events.

"It is expected that twice-daily ~~cavern explosions~~ **controlled detonations** lasting a few seconds would occur at the beginning of each shift. Shifts would be approximately 10 to 12 hours with no more than two a day. Therefore, explosions would not be continuous throughout the day. It is also proposed that early in the cavern excavation process, workers would clear the underground area and remain aboveground during the detonation sequence. Once the cavern is large enough, personnel could remain underground during the detonation sequence. However, this practice would be reviewed/evaluated by the CEC Compliance Project Manager (CPM), Cal OSHA Mining and Tunneling Unit, the KCFD, and the CEC Delegate Chief Building Official (DCBO) before implementing. Additionally, a ~~Blasting Plan~~ **Controlled Detonations Pan** is crucial for the safe excavation of the underground cavern when using explosives. Therefore, staff proposes Condition of Certification (COC) WORKER SAFETY-5 which would require the preparation and implementation of a thorough and comprehensive plan before any explosives are used onsite."

Page 4.4-21 - Underground Cavern Construction, item 1 - Since it is not a coal mine, we recommend removing the keyword "coal dust" from flammable materials. Please revise text as follows:

> "… Assess combustible materials: Analyze the presence of flammable materials like wood, grease, **and** oil, ~~and coal dust,~~ including their storage and handling practice".

Page 4.4-29, COC WORKER SAFETY-1, paragraph 1. It is recommended to consolidate the Construction Emergency Action Plan and the Emergency Response Plan into a single, comprehensive Emergency Management Plan. It is recommended to integrate the Mining Safety and Health Plan with the Construction Injury and Illness Prevention Program (IIPP) to avoid overlap and ensure that all MSHA regulations are addressed cohesively within the safety framework. It is suggested that the requirements of the Concrete Batch Safety Plan and Construction PPE Program be combined with the IIPP to reduce confusion associated with the number of site plans. The intent of the IIPP is that it includes all site health and safety requirements and that employees are trained in the IIPP requirements. Please revise text as HAZ-1 covers the Spill Prevention, Control and Countermeasure Plan (SPCC) and Hazardous Material Business Plan (HMBP). For suggested revisions to condition see Appendix A: Worker Safety and Fire Protection.

Page 4.4-30, COC WORKER SAFETY-1, Verification –It is recommended to consolidate the construction Emergency Action Plan and Emergency Response Plan into a single, comprehensive Emergency Management Plan. Please revise text as the Project Owner cannot control the actions of a third party, such as the Kern County Fire Department (KCFD). For suggested revisions to condition see Appendix A: Worker Safety and Fire Protection.

Page 4.4-30, COC WORKER SAFETY-2, paragraph 1 – It is recommended to consolidate the Operations Emergency Action Plan and the Operations Emergency Response Plan into a single Operations Emergency Management Plan. Please revise text as HAZ-1 covers the HMBP and SPCC. For suggested revisions to condition see Appendix A: Worker Safety and Fire Protection.

Page 4.4-32, COC WORKER SAFETY-5 - The notification radius should be reduced to 1 mile. Analysis provided by the Applicant indicates that vibrations will be imperceptible at a fraction of this distance. Please see Appendix A: Worker Safety and Fire Protection with recommended changes.

Page 4.4-35, COC WORKER SAFETY-6 – Please revise to allow for either the use of a state certified laboratory analysis **or provide copies of an equivalent analysis if available from AVEK**,

Page 4.4-36, COC WORKER SAFETY-8 – Please revise to coincide with underground construction activities, per comments in Appendix A.

Page 4.4-37, COC WORKER SAFETY-11 – Please revise to grant the CPM the flexibility to make certain changes based on site and project-specific conditions.

5.0 ENVIRONMENTAL IMPACT ASSESSMENT

5.1 Air Quality

Page 5.1-31, COC AQ-SC-3 -- Watering the soil three times a day may not be indicated. An alternative language is suggested using the staff conditions from the Palmdale Energy Center from 2015. Also, the only way to measure opacity is with a Ringelmann scale which is only applicable to point sources (not fugitive sources) using EPA Method 9. This requires certified smoke readers to take readings over 60 minutes. Propose to use Method

22 which is a qualitative technique and is designed for fugitive sources of dust. Also suggest removing condition 7 which is redundant with Staff Condition 6 and increase the use of watering/stabilizers if visible plumes affect public roads or residences. Lastly, using mulch as ground cover in a desert climate for weed control does not appear to be relevant. For revisions to conditions see Appendix A: Air Quality.

Page 5.1-35 COC AQ-SC-5, item 7 – Suggest removing the last sentence. For revisions to conditions see Appendix A: Air Quality.

Page 5.1-39, COC AQ-7, Verification – The only way to provide "operating data" to demonstrate compliance with this condition is to conduct a source test. Engines typically only run for 30 minutes once a month. That is not long enough to complete a source test. Recommend a manufacturer's compliance certification instead. For revisions to conditions see Appendix A: Air Quality.

Page 5.1-41, COC AQ-17, Verification – For revisions to conditions see Appendix A: Air Quality.

Page 5.1-42, COC AQ-18, Verification – For revisions to conditions see Appendix A: Air Quality.

5.2 Biological Resources

Page 5.2-21, Table 5.2-4 – this table indicates that there are Joshua tree woodland in P1 and P2, which is inconsistent with information reported on page 5.2-6 paragraph 2 "Joshua Tree Woodland" that reports that the Applicant mapped Joshua tree woodland along the northern portion of the gen-tie line. Delete the references to Joshua tree woodland in P1 and P2 as no Joshua tree woodlands have been mapped or verified at these locations.

Page 5.2-144, Table 5.2-9 – This table suggests that the project will result in loss of nursery sites; however, what these sites are and where they are located is not defined. Please delete references.

Page 5.2-148, Paragraph 3 – This paragraph reads "Staff notes that there are other locations within the project area, especially within the WRESC site, P1, P2 North, and P2 South, that exhibit characteristics that may meet the CNPS definition of Joshua tree woodland and were mapped as different vegetation communities by the applicant". Given available data does not support the conclusion that a woodland is present other than on the gen-tie alternative, please delete all other references to presence of Joshua tree woodland.

Page 5.2-153, paragraph 2 – This paragraph refers to silver cholla; however, this species is not referenced elsewhere in the PSA including Table 5.2-5 – known and potential occurrence of special-status plants, bryophytes, lichens, and fungi within the project area. Please delete the references.

Page 5.2-165, paragraph 2 – This paragraph defines the potential direct loss of high and medium-low quality Crotch's bumble bee habitat with the berm and no berm scenarios. It is not clear how compensation ratios identified in BIO-14 are considered different habitat quality across the Project site.

Page 5.2-170, paragraph 3 – This paragraph reads "*the project owner would be required to include suitable milkweed species as part of the seed mix along with other flowering plants used by pollinators such as monarchs*". Given the paragraph concludes that the site does not provide suitable tree groves or milkweed required for the species and is outside of the overwintering range it is unclear why the COC requires the project owner to plant larval foodplant for this species.

Page 5.2-215, COC BIO-1, Verification – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-216, COC BIO-2, paragraph 1 – It is recommended that removal of the designated biologist (DB) be applied during operations. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-217, COC BIO-3, Verification – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-218, COC BIO-4 – Please incorporate the list of conditions under which the DB should halt work.

Page 5.2-218, COC BIO-4 – numbered item 4 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-219, COC BIO-4, Verification – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-219, COC BIO-5 – It is suggested that the Worker Environmental Awareness Program (WEAP) be limited to individuals doing or supervising manual work on site. It is suggested that the WEAP is given within 10 days of the project commencing.

Page 5.2-219, COC BIO-5, paragraph 1 – It may not be feasible to present the WEAP to firefighting crews and delivery personnel during an emergency. It is recommended that fire crews be trained beforehand. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-219, COC BIO-5, numbered item 12 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-221, COC BIO-5, Verification, paragraph 4 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-223, COC BIO-6, numbered item 7 – Please clarify what type of aerial imagery is considered sufficient.

Page 5.2-223, COC BIO-6, numbered item 7 – Closure is addressed elsewhere. Closure will be in accordance with the applicable LORS. Preparation of closure plans for biological resources now would require speculation. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-223, COC BIO-6, Verification, paragraph 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-223, COC BIO-6, Verification, paragraph 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-224, COC BIO-6, Verification, paragraph 4 – Please provide the scope and scale of aerial imagery required to reflect site conditions prior to preconstruction site mobilization and construction activities-related ground disturbance, grading, boring, and trenching.

Page 5.2-224, COC BIO-6, Verification, paragraph 5 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-224, COC BIO-7, numbered item 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-224, COC BIO-7, numbered item 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-225, COC BIO-7, numbered item 6 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-225, COC BIO-7, numbered item 7 – Please provide a definition of unexpected wildlife and indicate if it is intended to be limited to state or federally listed species. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-226, COC BIO-7, numbered item 9 – Please provide a definition of “moderate preexisting disturbance and minimal preexisting disturbance”. Further, the PSA concludes that bat roosting habitat is low given the distance from permanent water and roosting bats are not expected to occur (see PSA pg 5.2-200) as such surveys for roosting bats would be included as part of pre-construction surveys and bat specific surveys are not considered warranted. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-226, COC BIO-7, numbered item 10 – It is recommended to clarify that there is no obligation to avoid potential habitat, especially where there is no sign of presence. The current measure would prohibit any tree removal during the maternity season. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-226, COC BIO-7, numbered item 11 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-227, COC BIO-7, numbered item 16 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-228, COC BIO-7, numbered item 23 – It is recommended to make this measure specific to the generation tie-line rather than all electrical components. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-229, COC BIO-7, Verification, paragraph 3 – As the project owner is not the owner of the equipment, it is suggested that this information be provided upon request. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-229, COC BIO-8, paragraph 1 – Please provide clarification whether topsoil from "weed zones" identified in BIO-9 should also be retained for replacement post-construction and if topsoil retention is only intended for areas with no identified weeds. Additionally, please provide a description of areas that require restoration. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-230, COC BIO-8, numbered item B – It is unclear why the conditions require the Owner to restore temporarily and monitor disturbed areas as well as offset temporary disturbed areas at a 3:1 ratio, equivalent to permanent loss. It is suggested to offset temporary loss at a 1:1 ratio with restoration of temporarily disturbed areas in the Project Site.

Page 5.2-230, COC BIO-8, numbered item B – Please clarify the requirements of “re-contouring”. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-231, COC BIO-8, numbered item B.3.d – It is recommended to specify the meaning of "very weedy" through a linkage to BIO-9, which requires the owner to survey for weed infestations. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-231, COC BIO-8, numbered item B.4.e – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-231, COC BIO-8, numbered item B.5 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-232, COC BIO-8, numbered item B.9 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-232, COC BIO-8, numbered item B.10, paragraph 1 – For revisions to conditions see Appendix A.

Page 5.2-236, COC BIO-9, numbered item 9.i – Please specify the taxa to be avoided.

Page 5.2-238, COC BIO-10, numbered item 5 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-239, COC BIO-11 – It is suggested to include a process whereby contractors or the applicant may challenge the DB or biological monitor's order to halt construction or narrow the definition of circumstances under which the DB or biological monitor may halt construction. It is suggested to limit this condition to say that the DB or biological monitor is responsible for ensuring compliance with all other bio conditions.

Page 5.2-240, COC BIO-11, numbered item 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-240, COC BIO-11, numbered item 4 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-241, COC BIO-11, numbered item 9 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-243, COC BIO-12 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-254, COC BIO-14 – Please provide clarification on the methodology for calculating habitat loss for burrowing owl and Crotch's bumble bee. Please clarify the necessity of removal of invasives given that long-term and interim management focuses on preservation and does not include performance standards. Please clarify if mitigation for burrowing owl and Crotch's bumble bee should be occupied habitat. It is suggested to add language stating that unoccupied burrowing owl habitat may be used for mitigation as no occupied habitat was observed on site.

Page 5.2-254, COC BIO-14, paragraph 1 – Please revise the estimate of habitat loss to accurately reflect site conditions and acknowledge that temporarily disturbed areas will be restored. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-261, COC BIO-15, numbered item 1 – Please provide clarification on and rationale for lizard surveys as this species group was not identified as a group of concern during application review. It is unclear why this species group has now been identified as requiring mitigation.

Page 5.2-262, COC BIO-16, numbered item 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-262, COC BIO-16, numbered item 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-263, COC BIO-16, numbered item 5 – Please provide clarification for the $105 fee per acre for long-term disturbance of raven habitat. Please include rationale for the necessity of the payment if raven management measures are implemented as well as how the fee amount was determined.

Page 5.2-264, COC BIO-17 –Please ensure consistency with the dates that are provided in this condition as two dates are given, one (1 Feb to Aug 31) in the second paragraph, and the second (1 Jan to Aug 31) under item 3.

Page 5.2-265, COC BIO-17, numbered item 3 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-265, COC BIO-17, numbered item 4 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-265, COC BIO-17, numbered item 8 – Please provide clarification as to what "mitigated post construction" is intended to require.

Page 5.2-271, COC BIO-18, paragraph 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-271, COC BIO-18, Verification, paragraph 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-274, COC BIO-19, numbered item 5, paragraph 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-274, COC BIO-19, numbered item 6 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-276, COC BIO-19, numbered item 11 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-278, COC BIO-20, numbered item 1, paragraph 1 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-278, COC BIO-20, numbered item 3 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-279, COC BIO-21, numbered item 1, paragraph 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-280, COC BIO-21, numbered item 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-280, COC BIO-21, numbered item 3 – Please provide rationale for related to the inclusion of Wolverine and Fisher as they are not known in the area. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-280, COC BIO-21, numbered item 5 – Please provide rationale for s related to salvage of small mammals and what threshold is to be applied in determining whether a salvage could be required. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-281, COC BIO-22 –As American Badger and Desert Kit Fox are covered under COC BIO-21, it is recommended that these species be listed under just one COC.

Page 5.2-281, COC BIO-22, numbered item 1, paragraph 2 – Please provide clarification on setback buffers as the recommended buffer from an active den under item 1 is 500 feet but 250 feet under item 2.

Page 5.2-282, COC BIO-22, numbered item 3 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-283, COC BIO-23, paragraph 2 – Recommend condition be revised to clarify that it is not CEC Staff's intention to delay construction and the preconstruction protocol surveys will only be required if construction commences in 2026 after the applicable protocol survey windows.

Page 5.2-285, COC BIO-24, numbered item 1 – It is suggested to revise the stop work authority triggers; particularly the trigger to stop work if "new information becomes available that was not known to the CEC CPM or CDFW at the time of project certification".

Page 5.2-285, COC BIO-24, numbered item 2 – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-285, COC BIO-24, numbered item 4 – Please consider removing as this is covered in above conditions. If this is kept, please clarify that surveys need to be conducted before clearing and land works. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-286, COC BIO-24, numbered item 5.d – Please consider if these measures are feasible during construction and consider increasing the inches of rain or percentage chance specified and provide clarification on the basis for the provided numbers. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-286, COC BIO-24, numbered item 5.h – Please consider removing the following as it is a duplicate of previously identified conditions. Alternatively, consider moving specifics of this condition under BIO-7 or BIO-8. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-287, COC BIO-24, numbered item 5.m – For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-287, COC BIO-24, numbered item 5.q – Daily equipment cleaning is an onerous task, please consider revising to require cleaning when entering and leaving site or moving between weedy or non-weedy areas. Alternatively, consider moving this to the invasive species plan. For revisions to conditions see Appendix A: Biological Resources.

Page 5.2-290,291, COC BIO-24, numbered item 8 – Please consider removing unless specific to watercourses as these requirements should be covered under the vegetation management COC." For revision to conditions see Appendix A: Biological Resources.

Page 5.2-291, COC BIO-24, numbered item 11 – Please make this condition consistent with the findings of no permanent impacts to state waters. For revision to conditions see Appendix A: Biological Resources.

5.3 Climate Change and Greenhouse Gas Emissions

No comments or suggestions regarding Section 5.3 of the PSA.

5.4 Cultural and Tribal Cultural Resources

Page 5.4-145, COC CUL/TRI-1, Verification, paragraph 1 – Suggest shortening requirement to submit qualifications 75 days prior to construction which seems unnecessarily long to facilitate timely construction. Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested revision to the COC CUL-TRI-1, Verification text.

Page 5.4-146, COC CUL/TRI-2, paragraph 1 – Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested revision to the COC CUL-TRI-2 text.

Page 5.4-147, CUL/TRI-2, Verification, paragraph 1 – Suggest reducing the 40-day verification requirement, which may cause scheduling issues as it creates a minimum 40-day delay for construction start post CEC final decision. Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested revision to the COC CUL-TRI-2 Verification text.

Page 5.4-151, COC CUL/TRI-4 Verification, paragraph 1 – Suggest reducing verification timelines to avoid scheduling delays. Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested revision to the COC CUL-TRI-4 Verification text.

Page 5.4-151, COC CUL/TRI-5, paragraphs 1 and 2 – Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested revision to the COC CUL-TRI-5 text.

Page 5.4-158, COC CUL/TRI-8 – Missing Verification. Please refer to Appendix A: Cultural and Tribal Cultural Resources for suggested text for verification of the COC CUL-TRI-8.

Page 5.4-158, COC CUL/TRI-9 – Suggest deleting this COC in its entirety for the reasons set forth below.

Engineering/ROW Constraints

Moving the line as requested in COC CUL/TRI-9, was explored and determined not feasible in its entirety for a variety of reasons, including, but not limited to the following:

1) Presence of an existing transmission line in that corridor.

2) Relocation of the Preferred Gen-Tie route will require decommissioning of that line and installation of taller poles to carry the existing line infrastructure as well as Project infrastructure.

3) Rights-of-Way and landowner issues.

Therefore, when assessing the entirety of the route and its potential visual effects, any net potentially adverse impact, should any such impact in fact exist, is entirely mitigated by the application of COC CUL/TRI-10.

Moving the Preferred Gen-Tie route to the south side of Felsite Avenue between 65th Street West and Mojave Tropico Road, and to the east side of Mojave Tropico Road from Felsite Avenue to Irone Avenue results in less than a 50-feet difference in distance from the Tropico Gold Mine. The presence of transmission poles and lines on either the north or south side of the roadway, some 50 feet between either option, does not present an impact to reach CEQA thresholds for a significant and material impact to the Tropico Gold Mine.

Page 5.4-159, COC CUL/TRI-10 – Painting the line poles rustic brown could be considered a practical request and possibly a best-practice and would entirely serve as adequate mitigation for any possible adverse indirect visual impact.

If Staff were to determine adverse impacts are still present, more meaningful and appropriate mitigation measures could be employed. For example, preparation of additional research further documenting the history of the Tropico Gold Mine and its contributions to local, regional, and national history of gold prospecting and mining, commerce, and economic growth of the surrounding area. Such a paper or lay publication could be prepared to benefit the

local community, historians, and the general public to be made available as an online publication, or perhaps given as a presentation at a local historical society or other event.

5.5 Efficiency and Energy Resources

Page 5.5-1 – Please revise text as follows:

> **“**The project site is currently proposed on undeveloped land in an area zoned Exclusive Agriculture ~~(A-1)~~ **(A)** District. The area surrounding the project boundary is largely undeveloped with very sparse residential development; the nearest residence is approximately 0.8 miles northwest of the northwest corner of the project.”

Page 5.5.5 - Please revise text as follows:

> ***“****No Impact*. The project is committed to energy-efficient construction and would implement measures to reduce energy consumption during construction process. The project would recycle construction and demolition debris in compliance with Assembly Bill 341 and State Bill 1018. See Section 5.12, Solid Waste Management~~, in the forthcoming complete PSA~~ for further discussion”.

5.6 Geology, Paleontology, and Minerals

Page 5.6-1, Paragraph 2 – Please revise text as follows:

> “To generate electricity (known as the “discharge cycle”), compressed air is discharged from the cavern. The cool high-pressure air exiting the cavern is reheated using the heat stored by the thermal management system and the same set of heat exchangers that were initially used to extract it. The reheated compressed air is then used to drive air-expansion turbine generators, which convert the stored potential energy back into electricity for the grid. The project would also use the deep vertical shafts for excavation~~,~~ **and** construction~~, and maintenance~~ of the cavern. (WSP 2025g)”.

Page 5.6-4 – Please revise text as follows:

> “A deep subsurface geotechnical investigation bored **six** ~~three~~ core holes at the project site to assess the lithology of the A-CAES cavern target horizon. From the ground surface, the core holes drilled 3,015 ft and 3,167 ft down to elevations between 445 ft and 607 ft below mean sea level. The target horizon is nearly entirely quartz monzonite. **The proposed footprint of subsurface cavern is approximately 0.8 miles away from ZEV-CH-02-23.** Within the target horizon in core ZEV-CH-02-23, two thin diorite dikes intersected the core. Also in this core, quartz monzonite in the lower part of the target horizon has recrystallized, mostly into monazite, a hard and resistant mineral.
>
> In all **six** ~~three~~ core holes, the quartz monzonite showed varying amounts of hydrothermal alteration. Hydrothermal alteration occurs when hot and mineral-rich fluids interact with rocks and minerals, changing mineral compositions, textures, and structures (ESHD 2024g). Dibblee (1963) hypothesized that hydrothermal alternation of quartz monzonite in region occurs on faults and fractures.”

Page 5.6-4 – Please revise text as follows:

> “~~In core ZEV-CH-01-23, quartz monzonite in the target horizon is slightly altered to almost entirely fresh. In core ZEV-CH-02-23, thick zones of moderately to highly altered quartz monzonite were logged between the 456 feet and 401 feet above mean sea 0 level (AMSL). In core ZEV-CH-03-23, the quartz~~

~~monzonite was logged as moderately to highly altered between 570 and 455 ft AMSL. In borehole ZEV-CH-03-23, elsewhere in the target interval, the quartz monzonite was mostly logged as fresh to slightly altered. (ESHD 2024g)~~ **Based on the observed level of alterations logged in the six core hole logs, the proposed footprint of subsurface cavern was centered around core holes ZEV-CH-01-23, ZEV-CH-05-24, ZEV-CH-06-24, and the proposed horizon for cavern construction was placed (between 510 and 460 ft AMSL) in fresh to slightly altered rock mass**".

Page 5.6-24 – Please revise text as follows:

"To inform the project's final design, COC GEO-1 requires the project owner to complete and submit a geotechnical and geohazard report to the CEC for review and approval. The report should include final grading and facility design refinements to reduce, to the extent feasible, hazards from ~~strong~~ **site-representative** seismic ground shaking".

Page 5.6-24 – Please revise text as follows:

"During project construction and operation, compliance with COCs GEO-1 to GEO-3, and Facility Design COCs GEN-1, CIVIL-1, and STRUC-1 (see Section 4.1, Facility Design) would ensure the project's design, grading, and construction would reduce potential impacts from ~~strong~~ **site-representative** seismic ground shaking on the project, including on human life, property, and grid, to less than significant".

Page 5.6-24 – Please revise text as follows:

"A geotechnical evaluation of the A-CAES cavern target horizon found that the quartz monzonite bedrock is expected to be seismically stable (ESHD 2024i). Literature evaluating the seismic stability of caverns supports the conclusion that deep underground openings are seismically stable, if the rupturing fault does not intersect the opening (Dowding and Rozen 1978; Sharma and Judd 1991; Jaramillo 2017). COC GEO-2 requires the proposed underground structures, the cavern and vertical shafts, be designed and constructed with appropriate civil and structural design criteria provided, including the LORS referenced in Appendix 2A (ESHD 2024o). ~~COC GEO-3 requires inspections and maintenance of the proposed underground structures~~."

Page 5.6-26 – In preceding paragraphs, PSA mentions that potential impact of landslides during construction and operation of WRESC and temporary laydown site would be less than significant. In addition, two areas along preferred and alternate routes of gen-tie lines are classified as classes 5 to 9, while the remainder of the proposed gen-tie routes are in class 0 areas. Therefore, we suggest that the geotechnical and geohazard report from landslide should be limited to gen-tie routes, and not extended to the entire project site. Please revise text as follows:

"To inform the project's final design, COC GEO-1 requires the project owner to complete and submit a geotechnical and geohazard report to the CEC for review and approval. The report should include final grading and facility design refinements to reduce, to the extent needed, hazards to the **gen-tie routes** ~~project~~ from landslides".

Page 5.6-27 - Please revise text as follows:

"For the project's final design, grading, and construction, COC **WATER-1** and WATER-2 (see Section 5.16, Water Resources) requires the project owner to obtain CPM approval of a site-specific Drainage, Erosion and

Sedimentation Plan (DESCP) that addresses all project elements of stormwater management during project operations. COC **WATER-1** and WATER-2 requires the DESCP to include the following".Page 5.6-30, paragraph 2 - Please revise text as follows:

> "COC GEO-2 requires the proposed underground structures, the cavern and vertical shafts, be designed and constructed with appropriate civil and structural design criteria provided, including the LORS referenced in Appendix 2A (ESHD 2024o). ~~COC GEO-3 requires inspections and maintenance of the proposed underground structures~~".

5.6-35, paragraph 5 - Please revise text as follows:

> "COC GEO-2 requires the proposed underground structures, the cavern and vertical shafts, to be designed, excavated, and constructed with appropriate civil and structural design criteria provided, including the LORS referenced in Appendix 2A (ESHD 2024o). ~~COC GEO-3 requires inspections and maintenance of the proposed underground Structure~~".

Page 5.6-52 – Please revise text as follows:

> "The following COCs are proposed for Geology, Minerals, and Paleontology for the proposed project. Descriptions of COCs GEN-1, CIVIL-1, and STRUC-1 are in Section 4.1, Facility Design. Descriptions of COCs **WATER-1**, WATER-2 and WATER-5 are in Section 5.16, Water Resources. Since the project is unlikely to exacerbate an existing geologic hazard, such as inducing seismic activity, the engineering related COCs primarily ensure the project is appropriately designed to withstand geologic hazards impacting the project and supports grid reliability. For purposes of these COCs, references to the California Building Code and Code of Federal Regulations means the code in force at the time the project starts ground disturbing activities".

Page 5.6-52, COC Introduction and COC PAL-3 – Please refer to Appendix A: Geology, Paleontology and Minerals for suggested revisions to the COC.

Page 5.6-54. COC GEO-2 - There are adequate standards in underground design that preclude the use of Norwegian Tunneling Code. Please refer to Appendix A: Geology, Paleontology and Minerals for suggested revisions to the COC.

Page 5.6-54. GEO-3 - The underground works including the shaft and cavern are being designed for longer than 50 years of operational life. Limited inspections of underground works will be performed remotely, which may be limited to the shafts and the cavern zones and the vicinity of shafts only. It is impractical to perform annual inspection of underground caverns, which is not a standard practice even for mined hydrocarbon storage facilities. Please refer to Appendix A: Geology, Paleontology and Minerals for suggested revisions to the COC.

5.7 Hazards, Hazardous Materials/Waste, and Wildfire

Page 5.7-34, COC HAZ-3 – Please refer to Appendix A: Hazards, Hazardous Material/Waste, for revision to COC HAZ-3.

Page 5.7-35, COC HAZ-5: Note that commissioning is part of the construction phase. Please refer to Appendix A: Hazards, Hazardous Material/Waste, for revision to COC HAZ-5.

5.8 Land Use, Agriculture, and Forestry

Page 5.8-28, COC LAND-1, second paragraph – The CEC "stands in the shoes" of Kern County, so there are not required Kern County "permits", given the CEC's preemption; however, it is routine for Project Owners to pay local fees for permits, ostensibly to cover the costs of the local government's review and comment confirming compliance with local requirements. Please refer to Appendix A: Land Use, Agriculture, and Forestry for suggested revision to COC LAND-1 text.

Page 5.8-29, COC LAND-2 – Please refer to Appendix A: Land Use, Agriculture, and Forestry for revision to COCs LAND-2.

Page 5.8-29, COC LAND-3 – The BLM will almost certainly issue a ROW grant, but they have discretion to use other forms of entitlement, leases for example. Please refer to Appendix A: Land Use, Agriculture, and Forestry for suggested revision to COC LAND-3 and COC LAND-3 Verification texts.

Page 5.8-30, COC LAND-4 – Construction equipment such as cranes can trigger FFA Notification. The construction equipment can trigger such notice due to its height or its location relative to an airport runway (slope analysis). Please refer to Appendix A: Land Use, Agriculture, and Forestry for suggested revision to COC LAND-4 and COC LAND-4 Verification texts.

5.9 Noise and Vibration

There are some areas where the PSA seems to conflate sound pressure and sound power levels for construction equipment. Similarly, there are some areas where the PSA seems to conflate the Leq and Ldn parameters, and to conflate dBA and dBL units. In addition, there are some areas where specific numerical values from the noise assessment require minor corrections. Fortunately, none of these editorial revisions have a material impact on the conclusions or recommendations provided in the PSA.

Page 5.9-6 – Regarding the twice daily, subterranean controlled detonations (sometimes colloquially referred to in the PSA as “blasting”), controlled detonations are expected to be conducted twice a day in 10-12 hours duration based on the Pre-FEED analysis. However, during FEED, based on subsurface contractor's proposed schedule, controlled detonation will be conducted based on required production rate and number of active faces, and may vary in the overall schedule of cavern construction. Because controlled detonation will be conducted at depth of 2,000 ft in the competent rock mass, sound waves will be attenuated before traveling to the surface and are not anticipated to cause impact on surface structures within project site, and would be significantly reduced at nearest noise receptor, that is located at 4,200 ft away from project site. Please revise text as follows:

> “Pile driving is anticipated to be used during surface work (ESHD 2024h, Section 5.7.3.2). Moreover, the project would utilize ~~rock blasting~~ **controlled detonations** to excavate the underground storage cavern. Blasts are ~~scheduled every 10 to 12 hours~~ at a depth of approximately 2,000 ft to minimize impact to surrounding areas (ESHD 2024i, Section 2.1.11). ~~Blasting activities are not continuous and are scheduled to occur twice per day during daytime hours~~”.

Page 5.9-7, paragraph 4 – Controlled detonations activity for cavern or shaft construction would be for short duration. However, they should not be bound to daytime only. The subsurface contractor will need flexibility to conduct controlled detonations according to production schedule. In addition, during shaft construction, the

controlled detonation will begin at a depth of 60-ft below ground surface. Therefore, the projected effects from shallow subsurface detonation will be even smaller than 9 dBA at NSA-1. Please revise text as follows:

> "Furthermore, each ~~blasting~~ **controlled detonations** event for underground cavern excavation would last only a few seconds. **During shaft construction, the controlled detonation will begin at a depth of 60-ft below ground surface. Therefore, the projected increase in noise from shallow subsurface detonation will be even smaller than 9 dBA at NSA-1** ~~Typically, rock blasting produces a maximum noise level of 130 dBA. considering this level is produce at the ground surface where the shaft would be installed, the projected noise levels at closest residence 5,400 feet away, NSA-1, is approximately 65 dBA. This is 9 dBA above the ambient noise level of 56 dBA Ldn at NSA-1 (ESHD 2024h, Section 5.7.3.2.2.2).~~ The impact would be less than significant because the ~~blasting~~ **controlled detonations** activities would occur ~~during the day and~~ on an infrequent basis for short durations".

Page 5.9-12, COC Noise-4, paragraph 1 – Seeks to limit project operations noise to 50 dBA Leq at NSA-1, which is consistent with modeling results in the assessment, but more restrictive than the "ambient + 5 dBA" threshold that would be required for project noise to be considered "not significant" based on applicable guidance. In addition, future noise levels at NSA-1 will include the contribution from project operations plus ambient noise from baseline sources (e.g., road traffic, wind, birds) such that the project noise level at NSA-1 cannot be measured directly in the field.

We recommend that COC NOISE-4, paragraph 1, be modified such that limits are specified in terms of total or cumulative Leq noise levels (i.e., ambient + project operations) since these values can be measured directly in the field. We also recommend that the specific numerical value of the noise limits be adjusted to be "ambient + 5 dBA" such that the effect of project operations noise, as such a level considered not significant. Please refer to Appendix A: Noise and Vibration for suggested revision to COC Noise-4 text.

Page 5.9-13, COC NOISE-6, paragraph 1 – condition prohibits nighttime construction activities within 1,000 feet of a residence. Should clarify that this is only noisy above-ground construction activities (i.e., underground construction activities can proceed during the nighttime period). Please refer to Appendix A: Noise and Vibration for suggested revision to COC Noise-6 text.

5.10 Public Health

Page 5.10-3, paragraph 2 – Please revise text to correct distances as follows:

> "* * * The nearest residential receptor is approximately ~~0.4~~ **0.8** miles from the property fence line of the WRESC."

5.11 Socioeconomics

No comments or suggestions regarding Section 5.11 of the PSA.

5.12 Solid Waste Management

Page 5.12-9, COC SOLID WASTE-1 – The waste management plans should also describe methods for maintaining waste shipping and disposal documents. All waste shipping papers, receipts, and applicable documentation shall be readily available for review. For revisions to the language in Section 5.12.5 of the PSA, Proposed COC, please refer to Appendix A: Solid Waste Management.

5.13 Transmission Line Safety and Nuisance

Page 5.13-3, Section 5.13.2, Please change Item a. “Affect aviation safety” to Less Than Significant with Mitigation Incorporated. Please revise the section regarding FAA applicability and corresponding LORS compliance table entries to harmonize with the analysis contained in Land Use Section 5.8, page 5.8-12. Please also refer to LAND-4 requiring FAA notification.

Page 5.13-4, Compressor unit electrical configuration – Please revise text as follows:

> “The project gross output would be 520 MW with an auxiliary load of 20 MW. The project would ~~generate~~ **store** power by utilizing four air compressor units. **Each compressor unit consists of two synchronous motors, soft-started and accelerated to synchronous speed using an LCI and 1200A breakers. The motors are transferred to the synchronous bus and 4000A breakers once they reach synchronous speed. (WRESC SAFC-Volume 1, part A, Chapter 3, Figure 3-1a through 3-1c and figure 3-2 and 3-3).** ~~Each compressor unit would connect with two, 3.63 kV-13.8 kV, 22.75 MVA three winding transformers that would step up generated voltage to 13.8 kV. Each unit, both transformer high sides are connected to the two separate 13.8 kV, 4000 Ampere bus bars via 1200 breakers. These two separated 13.8 kV buses provide power into its own unit air compressor motors. Each unit possess two separate compressor motors (WRESC SAFC-Volume 1, part A, Chapter 3, Figure 3-1a through 3-1c and figure 3-2 and 3-3)~~”.

Page 5.13-4 – Please replace “741.6 amperes” with “885 amperes” for the underground cable ampacity:

> “The underground line segment of the gen-tie constructs with 2000 kcmil parallel single conductor coper shielded cables. The cable’s current carrying capacity is approximately ~~741.6~~ **885** amperes per cable (WRESC SAFC-Volume 1, part A, Chapter 3, Figure 3-1a through 3-1c and Figure 3-2 and 3-3, Data Response submitted by the applicant December 13, 2024)”.

Page 5.13-4 – Based on the engineering design, the transformers that would be used are rated at 105/140/175 MVA as opposed to 96/128/160. Please revise text as follows:

> “Each unit, low sides of the three winding 13.8-230 kV, ~~96/128/160~~ **105/140/175** MVA transformer would tie into 13.8 kV buses via a dedicated 4000 Ampere breaker. High side of each unit transformer would connect with 230 kV bus bar via a motor operated disconnect switch. The same common bus bar would link with project 152.9 MVA, .85 PF, 13.8 kV ,60 HZ project generator via a 230-13.8 kV, ~~96/128/160~~ **105/140/175** MVA transformer, disconnect switch and a breaker through a 7000 A, 13.8 kV isolated phase busduct. The same common bus would tie into outgoing bus of the substation via each unit’s, a motor operated disconnect switch and a breaker. Outgoing SCE grid connected 230 kV gen-tie line would connect to the project’s common tubular bus bar where project’s four units connected. The project substation consists with capacitor banks to provide var support, surge arrestors to mitigate voltage spikes, lighting arrestors to mitigate lighting strike, grounding substation components to dissipate fault current and provide electrical connection for plant auxiliary loads (WRESC SAFC-Volume 1, part A, Chapter 3, Figure 3-1a through 3-1c and figure 3-2 and 3-3)”.

Page 5.13-5 – Please refer back to Land Use Section 5.8.2.3 for discussion regarding air navigation safety.

Page 5.13-10 – Please refer back to Land Use Section 5.8.2.3 for discussion regarding air navigation safety.

Page 5.13-10, Table 5.13-1 - Please revise this table to be consistent with FAA entry in Land Use Table 5.8-1.

> "Title 14, Part 77 of the Code of Federal Regulations (CFR)," Objects Affecting the Navigable Air Space". Describes the criteria for determining the need for a Federal Aviation Administration (FAA) "Notice of Proposed Construction or Alteration" in cases of potential obstruction hazards".

Page 5.13-13 – Section should add a bullet referring back to Land Use section discussion regarding air navigation safety and condition LAND-4.

5.14 Transportation

No comments regarding Section 5.14 of the PSA. For revisions to the language in Section 5.14.5 of the PSA, Proposed COC TRANS-1, TRANS-2, and TRANS-4, please refer to Appendix A: Transportation.

5.15 Visual Resources

Page 5.15-53, COC VIS-1 – This condition should be considered a direct form of mitigation of potential Project related visual impact as it aligns with established best practices to minimize visual impacts from development (e.g., Best Management Practices for Reducing Visual Impacts Associated with Renewable Energy Facilities on BLM-Administered Lands, and The Use of Color for Camouflage Concealment of Facilities [BLM Technical Note 446]).

Suggest referencing alignment with established best practices related to surface treatment colors to appropriately direct the selection and maintenance of treatment options to effectively minimize visual impacts from the Project.

For suggested revisions to COC VIS-1 please refer to Appendix A, Visual Resources. For additional information on COC VIS-1, please see Appendix C, Updated Visual Simulations.

5.16 Water Resources

Pg 5.16-1, 3rd paragraph - Add reference to "during operation" and revise text as follows:

> "**During Operation**, onsite stormwater flows would not be discharged outside the project site boundary. Stormwater within the project site would be conveyed by sheet flow and system flow (catch basins, swales, and stormwater conveyance piping) to an unlined stormwater pond on the southeast corner of the site."

Page 5.16-2 – Please correct AVEK reference as noted below:

> "Although the project site includes the Fremont Valley groundwater basin, approximately 6 percent of the water supplied by the proposed water purveyor Antelope Valley-East Kern Water Agency (AVEK) is produced from the Antelope Valley groundwater basin (6- 044) according to 2023 records (AVW 2024). The Antelope Valley groundwater basin is a very low priority basin with respect to overdraft (DWR 2020) and thus a groundwater sustainability plan is not required according to the SGMA; however, as of 1999, uncontrolled production and competing interests resulted in a 16-year court case that was finally resolved in December 2015 (AVW 2024). The ruling defined the Antelope Valley Adjudication Area and created the Antelope Valley Watermaster Board (AVWB) that administers adjudication water rights and manages the groundwater resource. An ~~AVECK~~ **AVEK** representative is one of the permanent members of the AVWB, and AVEK staff perform administrative functions. In addition, groundwater producers were required to reduce their allotment over a seven-year period. According to the ordered rampdown schedule, AVEK's

groundwater allotment was reduced from 4,000 acre-feet per year (AFY) to 3,550 AFY in 2023. As a result of a property purchase, AVEK's annual groundwater allotment was revised to 4,250 AFY (AVW 2024)."

Page 5.16-3, 1st paragraph – Please revise text as follows:

"According to the Dam Breach Inundation Map Web Publisher sponsored by the California Department of Water Resources (DWR), there are no dams in the region that could cause inundation of the project area (DWR 2025). However, the outer berm of the proposed hydrostatic compensation reservoir qualifies as a dam subject to design and safety standards of DWR, Division of Safety of dams (DSOD) under California Water Code (CWC) Sections 6002 and 6003 since the outer berm exceeds 6 feet in height and would impound more than 50 acre-feet (AF). ~~Theoretically, a failure of the hydrostatic compensation reservoir berm at its base could result in an estimated release of 409 AF of water that would inundate local drainages and possibly impact local roadways, railroads and developments in eastern Rosamond~~".

Page 5.16-3, 4th paragraph - Suggest removing the reference to "contain approximately three times the volume of" as follows:

"During project construction, sanitary wastewater needs would be addressed by portable toilets. Lined ponds would be required **for** ~~to contain approximately three times the volume of~~ drill cuttings produced during two phases of access shaft installation: 1) Drilling access shafts for A-CAES cavern construction 2) Drilling access shafts to initiate A-CAES cavern operation (ESHD 2024i). During project operation, industrial related wastewater would be contained in tanks and periodically disposed off-site by a third-party vendor (CLEG 2025). Sanitary waste from the administration/control building would be collected in a septic tank and either dispersed by a standard leach-line system, or periodically pumped out and disposed off-site by a third party vendor (ESHD 2024h)."

Page 5.16-10 - The Applicant does not agree with the estimate of water release stipulated in this section. Inundation analysis and mapping will be overseen by DSOD based on the final reservoir design. Until then, it is speculative to stipulate a specific quantity of water that could be released in the unlikely event of a complete embankment failure. Please revise text as follows:

"Possible failure of the hydrostatic compensation reservoir berm could result in the release of ~~an estimated 409 AF of~~ water ~~that would likely inundate local drainages and possibly impact local roadways~~, ~~railroads and developments in eastern Rosamond~~. To avoid a failure scenario, the hydrostatic compensation reservoir berm would be designed in accordance with DSOD requirements per COCs WATER-6 and WATER-7."

Page 5.16-12 - Please revise text as follows:

"According to the DWR's *Dam Breach Inundation Map Web Publisher*, there are no dams in the region that could cause inundation of the project area in case of a breach (DWR 2025). Since the project area is not near the coast or a large body of water, there is no danger of a tsunami, seiche, or vulnerability to sea level rise. As discussed in Item (c. ii), a possible failure of the hydrostatic compensation reservoir berm could result in a~~n estimated~~ release ~~of 409 AF~~ of water. To avoid damage from a possible failure scenario, the hydrostatic compensation reservoir berm would be designed in accordance with DSOD requirements per COCs WATER-6 and WATER-7".

Page 5.16-15, Table 5.16-1 - Please revise text as follows:

> "1) Local, Conformance column - If the applicant elects to construct an onsite leach line septic system, COC Water-5 would require the OWTS to comply with SWRCB ~~OTWS~~ **OWTS** design requirements.
>
> 2) ~~Yes. An erosion and control plan would be prepared prior to construction per WATER-2~~ **Yes, erosion control standards during grading activities will be included with the Construction SWPPP per WATER-1 and with the DESCP during project operations per WATER-2".**

Page 5.16-15, COC WATER-1 – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-16, COC WATER-1, Verification – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-16, COC WATER-2– For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-16, COC WATER-2, Verification – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-17, COC WATER-3 – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-17, COC WATER-3, Verification – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-18, COC WATER-4 – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-19, COC WATER-6, – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-21, COC WATER-6, Dam Safety Program Requirements, Verification Paragraph 3 – For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-21, COC WATER-7– For suggested revisions please refer to Appendix A: Water Resources.

Page 5.16-22, COC WATER-8 – For suggested revisions please refer to Appendix A: Water Resources.

Attachment A of the Proposed Condition

Page 5.16-25, Soil and Water Resources Attachment A, Title – Please revise text as follows:

> "**DRAFT WASTE DISCHARGE REQUIREMENTS AND MONITORING AND REPORTING FOR BORING WASTE DISCHARGES FOR WILLOW ROCK ENERGY STORAGE CENTER** "

Page 5.16-26, Soil and Water Resources Attachment A, Introduction – Please revise text as follows:

> "The discharges of waste from **boring waste for** the Willow Rock Energy Storage Center project (Project) must be in accordance with the requirements contained in these Waste Discharge Requirements (WDRs). These WDRs are applicable to the ~~following types of wastes:~~ boring wastes generated during shaft construction~~, fill and excavation wastes discharged to surface waters during gen-tie construction, and stormwater generated during construction~~. GEM ~~**A-CEAS**~~ **A-CAES** LLC, a subsidiary of Hydrostor, Inc., is referred to as the Applicant."

Page 5.16-29 to 5.16-32, Soil and Water Resources Attachment A, Sections D and E – Remove Sections D and E from Attachment A.

Page 5.16-32, Soil and Water Resources Attachment A, Section F– With the removal of Sections D and E renumber Section F as Section D.

Page 5.16-32, Soil and Water Resources Attachment A, Section F(D), Item 1 – Please revise text as follows:

> "1. The Applicant must at all times fully comply with the engineering plans, specifications, and technical reports developed for the Project and submitted to CEC ~~as part of the Preliminary Staff Assessment~~ **CPM for review and approval**."

Page 5.16-33, Soil and Water Resources Attachment A, Section F(D), Item 10 – Please revise text as follows:

> "10. The Applicant must give notice to the CEC as soon as possible of any planned alterations to the engineering plans, specifications, and technical reports developed for the Project and submitted ~~as part of the Preliminary Staff Assessment~~ **to the CEC PM for review and approval** that may change the nature or concentration of pollutants in the discharges."

Page 5.16-33, Soil and Water Resources Attachment A, Section G(E) – With the removal of Sections D and E renumber Section G as Section E.

Page 5.16-34, Soil and Water Resources Attachment A, Section H(F) – With the removal of Sections D and E renumber Section H as Section F.

Page 5.16-35, Soil and Water Resources Attachment A, Section H(F), Item 2 – Please revise text as follows:

> "Following completion of Project construction, the Applicant must submit a Project Completion Report to the CEC. The report must include the following information:
>
> a. Details on any modification from the construction plans to the proposed temporary lined ponds~~, fill and excavation activities in surface waters, construction stormwater management,~~ and/or disposal facilities.
>
> ~~b. Details on any changes to the amount of impervious coverage for this Project.~~
>
> ~~c. Any significant problems which occurred during construction and remedial measures taken.~~
>
> ~~d. The area and length of channel of permanent and temporary impacts to waters of the state cumulative for the entire Project.~~
>
> ~~e. Documentation that that revegetation success criteria have been completed.~~
>
> ~~f. A summary of the activities related to construction storm water controls and the BMPs used.~~
>
> g. Certification that the Project is in compliance with WDRs."

Attachment 1

Page 5.16-36, Best Management Practices Plan Guidance Attachment 1 – A BMP Plan would not be required under the Construction General Permit (CGP). Suggest removing Attachment 1 or noting that a BMP Plan is required if area to be disturbed is not covered under the CGP.

6.0 ENVIRONMENTAL JUSTICE

No general comments regarding Environmental Justice as presented in Section 6.0 of the PSA.

7.0 PUBLIC BENEFITS

No general comments regarding Public Benefits as presented in Section 7.0 of the PSA.

8.0 ALTERNATIVES

No comments regarding Alternatives as presented in Section 8.0 of the PSA.

9.0 COMPLIANCE CONDITIONS AND COMPLIANCE MONITORING PLAN

No comments regarding Section 9.0 of the PSA. For revision to the language in Section 9.8 of the PSA, Compliance COC, please refer to Appendix A: Compliance COC and Compliance Monitoring Plan.

APPENDIX A

Revised Conditions of Certification

ENGINEERING EVALUATION

Facility Design

Page 4.1-6, COC GEN-1, Verification – Please clarify who will determine what needs to be approved by the delegate chief building official (DCBO), also please revise text as follows:

> "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 design engineer, attesting that all designs, construction, installation, and inspection requirements of the applicable LORS and the 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, **if feasible,** 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".

Page 4.1-16 verification of COC STRUC-2, paragraph 1 – Please revise text as follows:

> "Within five days of ~~discovering~~ **discovery and verification of** the discrepancy the project owner shall provide the NCR to the DCBO for approval and the CPM."

Page 4.1-17 COC MECH-1– Typically the responsible mechanical engineer at each major equipment vendor will sign and stamp, not a single individual. Please revise text as follow:

> "**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 QA/QC 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 for the project **or the responsible mechanical engineer for the vendor of each major project component** 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.
>
> The DCBO may deputize inspectors to carry out the functions of the CEC's code enforcement mandate."

Page 4.1-17, COC MECH-1, Verification, paragraph 1 – Please revise text as follows:

"At least **15** ~~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".

Page 4.1-18 COC ELEC-1 – Please revise text as follows:

"Prior to the start of any increment of electrical construction for all electrical equipment and systems 110 Volts or higher (see a representative list, below) the project owner shall submit, for 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 plant design plans shall include:

1. one-line diagram for the ~~13.1~~**13.8** kV, 4.16 kV and 480 V systems;

2. system grounding drawings;

3. lightning protection system; and

4. hazard area classification plan.

B. Final plant calculations must establish:

1. short-circuit ratings of plant equipment;

2. ampacity of feeder cables;

3. voltage drop in feeder cables;

4. system grounding requirements;

5. coordination study calculations for fuses, circuit breakers and protective relay settings for the ~~13.1~~**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".

Transmission System Engineering

Page 4.3-11, COC TSE-1, Verification - Please revise text as follows:

> "Prior to the start of construction **of the transmission 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".

Page 4.3-13, COC TSE-5, item a – Please revise the text as follows:

> "The power plant outlet line shall meet or exceed the electrical, mechanical, civil, and structural requirements of CPUC General Order 95 or National Electric Safety Code (NESC); Title 8 of the California Code ~~and~~**of** Regulations (Title 8); Articles 35, 36 and 37 of the High Voltage Electric Safety Orders, National Electric Code (NEC) and related industry standards."

Page 4.3-14, COC TSE-5, items f.iv – Please revise text as follows:

> "Approval from LADWP indicating that the WRESC gen-tie line underground section can be built in the LADWP transmission corridor ~~and that the construction and operation of the underground gen-tie line will have no adverse impact to LADWP's operation~~."

Page 4.3-14, verification of COC TSE-5, item a – Please revise text as follows:

> "Design drawings, specifications, and calculations conforming with CPUC General Order 95 or National Electric Safety Code (NESC); Title 8 of the California Code ~~and~~ **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."

Page 4.3-14, verification of COC TSE-5, item b – Please revise text as follows:

> "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 ~~and~~ **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."

Page 4.3-15, verification for COC TSE-6 - Please revise the text as follows:

> "Within ~~60~~**90** days after first synchronization of the project, the project owner shall transmit to the CPM and DCBO:"

Worker Safety and Fire Protection

Page 4.4-29, COC WORKER SAFETY-1, paragraph 1 - Please revise text as follows:

"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."

Page 4.4-30, COC WORKER SAFETY-1, paragraph 2 – Please revise text as follows:

"The Personal Protective Equipment Program, the Exposure Monitoring Program, the Injury and Illness Prevention Program, the Rock Crusher Safety Protocol, **and** 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 Detonation**~~Blasting~~ Plan, the HMBP, and the Fire Prevention Plan shall be submitted to the KCFD **and Kern County Sheriff's Office (KCSO)** for review and comment ~~prior~~ **concurrently with**~~to~~ submittal to the CPM for approval. ~~The Blasting Plan shall also be submitted to the Kern County Sheriff's Office for review and comment~~."

Page 4.4-30, COC WORKER SAFETY-1, Verification – Please revise text as follows:

"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.** ~~on the Construction Fire Prevention Plan, the Emergency Action Plan, the HMBP, the Blasting Plan, and Emergency Response Plan, along with comments on the Blasting Plan from the KCSO~~."

Page 4.4-30, COC WORKER SAFETY-2, paragraph 1 –Please revise text as follows:

"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)."

Page 4.4-31, COC WORKER SAFETY-2, paragraph 2 and verification - Please revise text as follows:

"Verification: 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."

Page 4.4-32, COC WORKER SAFETY-5, paragraph 2 and item g - Please revise text as follows:

"The ~~blasting~~ **controlled detonations** notification procedures included in the ~~Blasting~~ **Controlled Detonations** Plan shall include, but not be limited to:

- At least 30 days before initiation of ~~blasting~~ **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 a proposed ~~blasting~~ **controlled detonations** activity and describing how to request and submit a pre~~-blasting~~ **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 ~~blasting~~ **controlled detonations** activities and how to obtain and submit a pre~~-blasting~~ **controlled detonations** survey".

Page 4.4-33, COC WORKER SAFETY-5, item g - Please revise text as follows:

~~g. blasting is prohibited during extreme fire danger periods.~~

Page 4.4-35, COC WORKER SAFETY-5, Verification - Please revise text as follows:

Verification: At least90 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 ~~Blasting~~ **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 ~~Blasting~~ **Controlled Detonations** Plan containing their comments on the ~~Blasting~~ **Controlled Detonations** Plan."

Page 4.4-35, COC WORKER SAFETY-6 - Please revise text as follows:

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.

Page 4.4-36, COC WORKER SAFETY-8, Verification – Please revise text as follows:

"**Verification:** At least 90 days prior to the start of ~~site mobilization~~ **underground 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."

Page 4.4-37, COC WORKER SAFETY-11, paragraph 1 –Please revise the text as follows:

"The project owner shall do the following at the project site**, unless the CPM provides written confirmation that one or more of the following is not required**:"

ENVIRONMENTAL IMPACT ASSESSMENT

Air Quality

Page 5.1-31, COC AQ-SC-3 -- Please revise text as follows:

"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.

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 **or the application of soil stabilizers** shall take place **as necessary** ~~a minimum of three times daily~~ where soil is being actively disturbed, unless dust is otherwise controlled by rainfall or use of ~~a~~ **soil stabilizers**. ~~dust suppressant.~~

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** ~~prevent~~ **visible** wind-blown dust ~~exceeding 20 percent opacity~~ at nearby residences or public roads. ~~If water is used, watering shall occur a minimum of three times daily, sufficient to keep soil moist along actively used roadways.~~ 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. ~~On dry days, watering shall occur a minimum of three times daily on actively disturbed areas~~. Watering frequency or the use of soil stabilizers shall be increased ~~whenever wind speeds exceed 15 mph or,~~ as necessary, to **minimize** ~~prevent~~ **visible** wind-blown dust ~~exceeding 20 percent~~

~~opacity~~ at nearby residences or public roads. **If water is used in place or to supplement soil stabilizers, then** r~~R~~eclaimed (non-potable) water shall be used to the extent available and feasible.

~~7. All clearing, grading, earth moving, and excavation activities shall cease during periods when visible dust plumes of 20 percent or greater opacity affect public roads or nearby occupied structures.~~

8. 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.

9. All active and inactive disturbed surface areas shall be stabilized, where feasible.

10. Equipment and vehicle access to disturbed areas shall be limited to only those vehicles necessary to complete the construction activities.

11. Where applicable, permanent dust control measures shall be implemented as soon as possible following completion of any soil-disturbing activities.

12. Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate methods sufficient to reduce visible dust **plumes** ~~emissions to a limit of 20 percent opacity.~~ 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.

~~13. Where acceptable to the fire department and feasible, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering".~~

Page 5.1-35 COC AQ-SC-5, item 7 – Please revise text as follows:

"7. Existing electric power sources shall be used to the extent feasible. ~~This measure would minimize the use of higher polluting gas or diesel generators~~".

Page 5.1-39, COC AQ-7, Verification – Please revise text as follows:

"The project owner shall submit to the CPM **a manufacturer's certification that the equipment complies with this limit.** ~~operating data to demonstrate compliance with this condition as part of the Quarterly Operation Reports~~ (**AQ-SC8**)."

Page 5.1-41, COC AQ-17, Verification – Please revise text as follows:

"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.**"

Page 5.1-42, COC AQ-18, Verification – Please revise text as follows:

> "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**."

Biological Resources

Page 5.2-215, COC BIO-1, Verification – Please revise text as follows:

> "The project owner shall submit the specified information at least ~~75~~ **30** days prior to the start of site mobilization or construction-related ground disturbance activities. No pre-construction site mobilization or construction related activities shall commence until a DB has been approved by the CPM."

Page 5.2-216, COC BIO-2, paragraph 1 – Please revise text as follows:

> "The project owner shall ensure that the DB 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 DB's function during plant operation in writing and provide justification of the request**, consistent with applicable law on privacy and personnel matters**. However, the project owner shall appoint a replacement DB at any time as directed by the CPM **for cause consistent with applicable law on privacy and personnel matters** and will ensure the same duties are performed during closure and restoration activities."

Page 5.2-217, COC BIO-3, Verification – Please revise text as follows:

> "The project owner shall submit the specified information to the CPM for approval and to the CDFW and USFWS for review and comment at least ~~45~~ **30** days prior to the start of any project-related site disturbance activities. Within 10 days of completion of training, the DB 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."

Page 5.2-218, COC BIO-4, numbered item 4 – Please revise text as follows:

> "The DB or Biological Monitor shall notify 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 holiday** of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities;"

Page 5.2-219, COC BIO-4, Verification – Please revise text as follows:

> "The project owner shall ensure that the DB 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 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."

Page 5.2-219, COC BIO-5, paragraph 1 – Please revise text as follows:

"The project owner shall develop and implement a project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM. The project owner shall also provide the CDFW a copy of all portions of the WEAP for review and comment. The WEAP shall be administered to all onsite personnel who will enter the project site including but not limited **to** surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, biologists, ~~firefighting crews~~, cultural, tribal, **and** paleontological monitors, ~~and delivery personnel.~~ An abbreviated WEAP (WEAP Light) can be provided to vendors 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 approval from the CPM and submitted to the CDFW for review and comment. 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:"

Page 5.2-219, COC BIO-5, numbered item 12 – Please revise text as follows:

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

Page 5.2-221, COC BIO-5, Verification, paragraph 4 – Please revise text as follows:

"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. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures. These forms shall be maintained by the project owner and shall be made available to the CPM and CDFW upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training."

Page 5.2-223, COC BIO-6, numbered item 7 – Please revise text as follows:

~~"A discussion of biological resources-related facility closure measures including a description of funding mechanism(s);"~~

Page 5.2-223, COC BIO-6, Verification, paragraph 1 – Please revise text as follows:

"The project owner shall submit the draft BRMIMP to the CPM for **review and** approval and the CDFW for review and comment at least 45 days prior to start of any site mobilization. The project owner shall provide **the** final BRMIMP to the CPM, CDFW at least 7 days prior to start of any site mobilization. The BRMIMP shall contain all of the required measures included in all biological COC and any other relevant permits. No site mobilization or construction activities may occur prior to approval of the final BRMIMP by the CPM.

Page 5.2-223, COC BIO-6, Verification, paragraph 2 – Please revise text as follows:

> "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. Under no circumstances shall ground disturbance proceed without implementation of all **applicable** permit conditions".

Page 5.2-224, COC BIO-6, Verification, paragraph 5 – Please revise text as follows:

> "Construction acreages shall be rounded to the nearest acre. The project owner shall also provide GIS shape files of all pre-and post-disturbance areas no later than ~~30~~ **90** days after completion of construction."

Page 5.2-224, COC BIO-7, numbered item 1 – Please revise text as follows:

> "Avoid ~~Blasting~~**Controlled Detonations** at Night **within 50 ft of the Surface**. ~~Blasting~~ **Controlled Detonations within 50 ft of the surface** 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;"

Page 5.2-224, COC BIO-7, numbered item 2 – Please revise text as follows:

> "Limit Disturbance Areas. The boundaries of all areas to be temporarily or permanently disturbed (including staging areas, access roads, ~~transmission line~~ **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 DB. All construction sites, laydown areas, and parking locations shall be fenced to prevent potential access to the site by small animals including desert tortoise. Fencing would not be required around ~~transmission line~~ **generation tie-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;"

Page 5.2-225, COC BIO-7, numbered item 6 – Please revise text as follows:

> "Prevent Wildlife Entrapment. All pipes, tubes, ducting, or other cavities shall be capped to prevent wild~~fire~~**life** entrapment. Portable toilets shall require vent pipes to be screened to prevent cavity using birds from becoming trapped in the pipe;"

Page 5.2-225, COC BIO-7, numbered item 7 – Please revise text as follows:

> "Unexpected Wildlife. The DB or Biological Monitor shall ensure that any unexpected wildlife such as California condor, desert tortoise, Mohave ground squirrel, or other species are avoided during construction. Should an unexpected species be detected a non-disturbance buffer shall be implemented based on the species ecology, and work shall be suspended in that area until the animal leaves on its own volition. Should a State or federally listed, proposed, candidate, of fully protected species be

identified on the project site, the DB or Biological Monitor shall notify the CPM immediately by phone and in written form within 24 hours."

Page 5.2-226, COC BIO-7, numbered item 9 – Please revise text as follows:

"Avoid Removing or Disturbing Bat Roosts. Active bat roosts shall not be disturbed and shall be provided a minimum buffer of 300 feet where preexisting disturbance is moderate or 500 feet where preexisting disturbance is minimal. Confirmation of buffer distances and determination of the need for a biological monitor for active maternity roosts or hibernacula shall be obtained in consultation with the CPM in coordination with the ~~and~~ CDFW. If suitable roost sites are to be removed or otherwise affected by the project, the bat biologist shall conduct targeted roost surveys of all identified sites that would be affected. ~~Because bat activity is highly variable (both spatially and temporally) across the landscape and may move unpredictably among several roosts, several separate survey visits shall be required~~."

Page 5.2-226, COC BIO-7, numbered item 10 – Please revise text as follows:

"Roost Site Removal. A qualified bat biologist shall survey potential roost sites prior to their disturbance or removal. 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 the CDFW. If removal of ~~or disturbance of trees or other potential of~~ roost sites cannot be avoided, removal shall be conducted outside the maternity season to avoid mortality of maternity colonies."

Page 5.2-226, COC BIO-7, numbered item 11 – Please revise text as follows:

"Prepare a Wildlife Protection and Relocation Plan. The DB or Biological Monitor shall prepare the Wildlife Protection and Relocation Plan (WPRP) to provide guidance and protocols when avoiding or handling common and sensitive species that are **incidentally** 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. The plan shall include methods to salvage or relocate common and sensitive wildlife **incidentally encountered** 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 monitor;"

Page 5.2-227, COC BIO-7, numbered item 16 – Please revise text as follows:

"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. For special-status species, the DB or Biological Monitor 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. Injured animals shall be reported to CPM and/or CDFW, and USFWS in the case of federally listed species, by the end of the business day per BIO-2 and the project owner shall follow instructions that are provided by the appropriate agency contact. During construction, injured or dead animals detected by personnel in the project area shall be reported immediately to a Biological Monitor or DB, 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 Biological Monitor or DB for further instructions. The veterinary fees for the treatment of injured wildlife shall be covered by the project owner for project-related injuries or found injured on the project site."

Page 5.2-228, COC BIO-7, numbered item 23 – Please revise text as follows:

"Conform to APLIC Guidelines. ~~Transmission lines~~ **Generation tie-line** and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006) and *Reducing Avian Collisions with Power Lines* (APLIC 2012) to reduce the likelihood of large bird electrocutions and collisions;"

Page 5.2-229, COC BIO-7, Verification, paragraph 3 – Please revise text as follows:

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

Page 5.2-229, COC BIO-8 – Please retitle condition to "~~Habitat Restoration and~~ Vegetation Management Plan",

Page 5.2-229, COC BIO-8, paragraph 1 – Please revise text as follows:

"The project owner shall develop a Habitat Restoration and Vegetation Management Plan (HRVMP or Plan). The HRVMP shall contain all the required restoration activities, measures, seed mixes, or other activities that will be used to stabilize temporarily disturbed areas. The Plan shall include the definition and schedule for all activities associated with restoration, performance criteria, schedules, and reporting requirements, and any proposed remediation activities. No site mobilization or construction activities may occur prior to approval of the final HRVMP by the CPM. The Plan shall be developed by a qualified botanist or restoration ecologist and vegetation management specialist to be approved by the CPM in consultation with CDFW. The Plan shall identify all areas of permanent and temporary impacts. The Plan shall specify success criteria and materials and methods for site preparation, reseeding, maintaining, and monitoring revegetated areas in ~~the following categories~~ **temporarily disturbed portions of the Project area**. The Plan shall clearly demonstrate how temporarily disturbed areas in desert areas shall be managed to stabilize the site and prevent the establishment of highly invasive weeds."

Page 5.2-230, COC BIO-8, numbered item B – Please revise text as follows:

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

Page 5.2-231, COC BIO-8, numbered item B.3.d – Please revise text as follows:

"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 very weedy~~ **is identified as weed infested using the methods outlined in BIO-9**."

Page 5.2-231, COC BIO-8, numbered item B.4.e – Please revise text as follows:

> "It is recommended that ~~course~~ **coarse** woody debris from damaged Joshua trees be strategically placed across the restoration areas to foster the development of micro habitats for plants and wildlife."

Page 5.2-231, COC BIO-8, numbered item B.5– Please revise text as follows:

> "The HRVMP shall include success criteria and percent cover for each of the proposed ~~restoration~~**ed temporarily disturbed** areas. Prior to the disturbance of any areas that would be **treated** ~~restored~~ the restoration ecologist shall ~~assess the species composition of the site and adjacent habitat to~~ develop a baseline goal for restoration including the percentage cover and type of weeds and the grass, **and** forb **cover**~~, shrub, and tree layers~~. The goal of the HRVMP is to prevent the establishment of highly invasive controllable weeds such as Russian thistle and Sahara mustard."

Page 5.2-232, COC BIO-8, numbered item B.9 – Please revise text as follows:

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

Page 5.2-232, COC BIO-8, numbered item B.10, paragraph 1 – Please revise text as follows:

> "At final grade, the last few inches shall not be compacted to more than 75 percent to facilitate penetration by plant roots. Salvaged topsoil shall be spread over the finish grade. The grade shall not be completely smoothed. Small ridges shall be provided for seedling wind protection and to collect moisture from rain and fog. Hydroseed or drill seeding with soil stabilization seed mixture shall be applied between October 1 and mid-November unless the restoration biologists provide justification to the CPM to alter the timing of the application. 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 hydroseed device. On slopes, the project owner shall augment the erosion control seed mixture with seed of ~~native coastal scrub~~ species native to the ~~site~~ **region** and collected from the project region. Appropriate seed mixtures for use **in desert habitat** ~~on grassland and coastal scrub areas~~ shall be developed in consultation with and approved by CPM and CDFW using seed of native species originating from the region."

Page 5.2-238, COC BIO-10, numbered item 5 – Please revise text as follows:

> "**Decontamination Sites.** The project owner shall identify a decontamination site approved by the CPM and CDFW. The project owner shall perform decontamination of vehicles, ~~watercraft,~~ and other Project-related gear and equipment 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."

Page 5.2-240, COC BIO-11, numbered item 1 – Please revise text as follows:

> "Monitors are responsible for ensuring that impacts to special-status species, native vegetation, wildlife habitat, and sensitive or unique biological resources are avoided or ~~fully~~ minimized ~~safely~~ **where** possible **in a manner** consistent with approved work limits and permit conditions. Monitors are also responsible for

ensuring that work activities are conducted in compliance with all conditions of certification (COCs), permit conditions, and other project requirements."

Page 5.2-240, COC BIO-11, numbered item 4 – Please revise text as follows:

"Each day, prior to **construction** work activities at each site, a biological monitor shall conduct clearance surveys ("sweeps") for sensitive plant or wildlife resources that may be within or adjacent to the construction areas. If sensitive resources are found, the biological monitor shall take appropriate action as defined in all COCs, approved lands, and permit conditions. Work activities shall not commence at any work site until the clearance survey has been completed and the biological monitor communicates to the contractor that work may begin."

Page 5.2-241, COC BIO-11, numbered item 9 – Please revise text as follows:

"At the end of each workday, biological monitors shall verify that all excavations, open tanks, trenches, pits, or similar wildlife entrapment hazards have been covered, **are backfilled**, or have ramps installed to prevent wildlife entrapment and communicate with work crews to ensure these structures are installed and functioning properly."

Page 5.2-242, COC BIO-12, paragraphs 1 and 2 – Please revise text as follows:

"The DB and/or Biological Monitor(s) shall conduct floristic pre-construction surveys for special-status plants. ~~All~~ **S**urveys shall be conducted by qualified biologists or botanists in accordance with **methodology reviewed by CPM** ~~the appropriate protocols~~. **Pre-construction s**urveys shall be conducted during the appropriate season in all suitable habitat within the project disturbance areas and access roads and within 100 feet of disturbance areas. 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 must conform to current CDFW botanical field survey protocol (CDFW 2018) or more recent updates, if available.~~ **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)** ~~Surveys~~ are required for areas that has**ve** not previously been surveyed by **the Applicant to-date**~~within three years~~. During each year of construction, prior to ground disturbance the project owner shall **identify** ~~submit a~~ proposed survey **areas** ~~plan~~ to the CPM for review and approval and the CDFW for review and comment prior to initiating ~~annual~~ botanical surveys. The Plan shall identify proposed survey areas and the rationale for any areas not proposed for surveys. The Plan shall include maps and GIS data clearly defining each proposed survey area.

Page 5.2-243, COC BIO-12, numbered item 2 – Please revise text as follows:

"**Compensatory Mitigation.** Except for western Joshua tree which are being mitigated under the WJTCA, the project owner shall mitigate impacts to any state or federally listed plants that are subject to disturbance and if more than 10 percent of an CRPR 1 or 2 ranked plant occurrence is subject to loss from project disturbance where direct or indirect effects to soils, vegetation, or water transport could affect the species. The local population shall be measured by the number of individuals occurring on the project site or all plants within a 0.25-mile buffer shall be considered part of the occurrence. Measurement of percent avoidance shall be based on population for perennials and on habitat for annuals (habitat

containing the species' micro-habitat preferences, such as "soil types and moist depressions"). The project owner shall provide compensation lands for impacts to any state or federally listed plants and CRPR 1 or 2 ranked plants at a 3:1 (State or federally listed) and a 2:1 ratio for CRPR 1 or 2 ranked species, ~~consisting of habitat occupied by the impacted acreage and number of plants for any occupied habitat affected by the project~~. Occupied habitat will be calculated on the project site and on compensation lands as including each special status plant occurrence and a surrounding 100-foot buffer area to account for seed bank."

Page 5.2-254, COC BIO-14, paragraph 1 – Please revise the text to indicate that the Project owner will purchase mitigation or conservation bank credits equivalent to the actual amount of direct habitat loss due to permanent or temporary loss. Suggested revision:

> The project owner shall purchase ~~a minimum of 843 acres of~~ Crotch's bumble bee and burrowing owl mitigation or conservation bank credits ~~approved in advance by the CPM~~ 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 the Item Endowment Fund. **Mitigation acreages may be "nested," satisfying obligations for more than one species, where mitigation lands provide biological values for more than one species, The amount of mitigation required shall be calculated based on the final project direct permanent and temporary loss of suitable Crotch's bumblebee and Western Burrowing Owl habitat.**

Page 5.2-254, COC BIO-14, paragraph 2 onwards. Please strike text as initial paragraph is sufficient to outline the land acquisition requirements.

Page 5.2-262, COC BIO-16, numbered item 1 – Please revise text as follows:

> "**Surveys.** Prior to ground-disturbing or vegetation removal activities within 200 feet of project components in suitable desert tortoise habitat the DB and/or Biological Monitor(s) shall conduct ~~protocol~~ **pre-clearing** surveys to detect this species. ~~Surveys shall be conducted during a time of year when desert tortoise can be detected. In addition, s~~**S**urveys 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~~ **consider** ~~consistent with~~ those described in the most recent *Desert Tortoise Field Manual* or more current guidance provided by CDFW and USFWS. Any potential burrows, sign, or tortoises shall be noted, recorded using a precision GPS device, and identified on Project maps."

Page 5.2-262, COC BIO-16, numbered item 2 – Please revise text as follows:

> "**Desert tortoise fencing.** The project owner shall install desert tortoise exclusion fencing around the project site, laydown, staging and parking areas. Fencing shall not be required to conduct work at or along the ~~transmission line~~ **generation tie-line** corridor. **Exclusion fence specifications will consider those described in the most recent *Desert Tortoise Field Manual* or more current guidance provided by CDFW and USFWS and may be incorporated with erosion control fencing where appropriate, though the CPM may authorize traditional construction fencing where site-specific conditions suggest no need for heightened measures.** After the completion of fencing the DB and or Designated Monitors shall conduct 5 meter clearance sweeps of the project site prior to vegetation and

clearance. 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."

Page 5.2-265, COC BIO-17, numbered item 3 – Please revise text as follows:

"**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~~ **February** 1 through August 31 in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation."

Page 5.2-265, COC BIO-17, numbered item 4 – Please revise text as follows as the text of the measure conflicts with the table:

"**Nest Detection.** If active nests, burrows, or surrogate burrows are detected during the survey, 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 will be based on the distance of the activity to the nest, the types 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 shrike caches which ~~will likely~~ **could** be detected during construction. **The NBMP will describe species or guild specific default buffers to be applied if an active nest is encountered. These buffers will be** ~~Specific buffer distances will be described and~~ approved by the CPM in consultation with the CDFW ~~in the NBMP; these buffers may be modified with the CPM's approval in consultation with the CDFW~~. For special-status species, if an active nest is identified, the size of each buffer zone shall be determined by the DB in consultation with the CPM (in coordination with CDFW or as described in COCs specific for those species). Nest locations shall be mapped using GPS technology. **Nest buffers will be delineated based on the following process:**

- **Upon discovery of an active nest the default buffer identified in the NBMP will be applied**
- **The DM or assigned biologist 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**
- **The nest buffer will not be adjusted to less than 100 ft without approval by the CPM."**

~~"Default buffers for different groups of birds are described below.~~

DEFAULT BUFFERS FOR	SPECIFIC AVIAN GROUPS DU	RING CONSTRUCTION
Avian Group (nest type/location)[1]	Species Potentially Nesting within Project Limits and Survey Area	Horizontal Buffer Ground Construction Per Disturbance Level (DL) (feet)[2]
Waterfowl	Mallard, American coot	Initial: 250 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100
Quail	California quail, mountain quail	Initial: 250 Reduced High DL: 125 Reduced Moderate DL: 100 Reduced Low DL: 75
Herons	Green heron, black-crowned night-heron	Initial: 250 Reduced High DL: 250 Reduced Moderate DL: 200 Reduced Low DL: 150
Birds of Prey (Category 1)	American kestrel, barn owl, western screech-owl, northern pygmy-owl	Initial: 500 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100
Birds of Prey (Category 2)	Cooper's hawk, red-tailed hawk (2) (urban/suburban), red-shouldered hawk, great horned owl	Initial: 500 Reduced High DL: 250 Reduced Moderate DL: 200 Reduced Low DL: 150
Birds of Prey (Category 3)	Turkey vulture, red-tailed hawk (2) (rural/remote); prairie falcon	Initial: 500 Reduced High DL: 500 Reduced Moderate DL: 400 Reduced Low DL: 300
Birds of Prey	Burrowing owl	Special conditions apply. See BIO-19
Birds of Prey	Swainson's hawk	Special conditions apply. See BIO-21
Birds of Prey	Golden eagle	Initial: 0.5 mile Buffer reductions will be coordinated with LADWP and CDFW
Shorebirds	Killdeer, black-necked stilt, American avocet	Initial: 250 Reduced High DL: 175 Reduced Moderate DL: 150 Reduced Low DL: 125
Pigeons	Band-tailed pigeon	Initial: 250 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100
Doves	Mourning dove	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25

DEFAULT BUFFERS FOR	SPECIFIC AVIAN GROUPS DU	RING CONSTRUCTION
Avian Group (nest type/location)[1]	Species Potentially Nesting within Project Limits and Survey Area	Horizontal Buffer Ground Construction Per Disturbance Level (DL) (feet)[2]
Roadrunners	Greater roadrunner	Initial: 250 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100
Nightjars	Lesser nighthawk, common poorwill	Initial: 250 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100
Swifts	White-throated swift	Initial: 250 Reduced High DL: 100 Reduced Moderate DL: 75 Reduced Low DL: 50
Hummingbirds	Black-chinned hummingbird, Anna's hummingbird, Costa's hummingbird, calliope hummingbird, Allen's hummingbird	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25
Woodpeckers	Acorn woodpecker, red-breasted sapsucker, ladder-backed woodpecker, Nuttall's woodpecker, downy woodpecker, hairy woodpecker, white-headed woodpecker, northern flicker	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25
Passerines (cavity and crevice nesters)	Say's phoebe (2), ash-throated flycatcher, violet-green swallow (2), red-breasted nuthatch, white-breasted nuthatch, pygmy nuthatch, brown creeper, rock wren (2), canyon wren, house wren (2), Bewick's wren, mountain chickadee, oak titmouse, western bluebird	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25
Passerines (bridge, culvert, and building nesters)	Black phoebe, Say's phoebe (2), violet-green swallow (2), northern rough-winged swallow, cliff swallow, barn swallow, house wren (2), house finch	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25
Passerines (ground nesters, open habitats)	Horned lark, rock wren (2), western meadowlark, lark sparrow	Initial: 250 Reduced High DL: 150 Reduced Moderate DL: 125 Reduced Low DL: 100

DEFAULT BUFFERS FOR	SPECIFIC AVIAN GROUPS DU	RING CONSTRUCTION
Avian Group (nest type/location)[1]	Species Potentially Nesting within Project Limits and Survey Area	Horizontal Buffer Ground Construction Per Disturbance Level (DL) (feet)[2]
Passerines (understory and thicket nesters)	Gray flycatcher, dusky flycatcher, Pacific-slope flycatcher, gray vireo, Cassin's vireo, California scrub-jay, bushtit, Bewick's wren, blue-gray gnatcatcher, Swainson's thrush, hermit thrush, wrentit, California thrasher, orange-crowned warbler, MacGillivray's warbler, common yellowthroat, , Wilson's warbler, yellow-breasted chat, green-tailed towhee, spotted towhee, California towhee, rufous-crowned sparrow, chipping sparrow, Brewer's sparrow, black-chinned sparrow, sagebrush sparrow, fox sparrow, song sparrow, dark-eyed junco, blue grosbeak, lazuli bunting, red-winged blackbird, American goldfinch	Initial: 250 Reduced High DL: 75 Reduced Moderate DL: 50 Reduced Low DL: 25
Passerines (scrub and tree nesters)	Olive-sided flycatcher, gray flycatcher, dusky flycatcher, Pacific-slope flycatcher, western wood-pewee, Cassin's kingbird, western kingbird, Cassin's vireo, Hutton's vireo, warbling vireo, Steller's jay, American crow, common raven, verdin, bushtit, blue-gray gnatcatcher, cactus wren, American robin, northern mockingbird, phainopepla, yellow warbler, yellow-rumped warbler, black-throated gray warbler, chipping sparrow, black-throated sparrow, western tanager, black-headed grosbeak, blue grosbeak, Brewer's blackbird, great-tailed grackle, hooded oriole, Bullock's oriole, Scott's oriole, purple finch, Cassin's finch, house finch, pine siskin, lesser goldfinch, Lawrence's goldfinch, American goldfinch	Initial: 250 Reduced High DL: 100 Reduced Moderate DL: 75 Reduced Low DL: 50

~~DEFAULT BUFFERS FOR~~	~~SPECIFIC AVIAN GROUPS DU~~	~~RING CONSTRUCTION~~
~~Avian Group (nest type/location)[1]~~	~~Species Potentially Nesting within Project Limits and Survey Area~~	~~Horizontal Buffer Ground Construction Per Disturbance Level (DL) (feet)[2]~~
~~Passerines (tower nesters)~~	~~Western kingbird, common raven, house finch~~	~~Initial: 250 Reduced High DL: 25 Reduced Moderate DL: 20 Reduced Low DL: 15~~
~~Passerines (marsh nesters)~~	~~Common yellowthroat, red-winged blackbird, tricolored blackbird, yellow-headed blackbird, great-tailed grackle~~	~~Initial: 250 Reduced High DL: 25 Reduced Moderate DL: 20 Reduced Low DL: 15~~
~~Special-status species~~	~~Loggerhead shrike, LeConte's thrasher, long-eared owl~~	~~Initial: 500 Buffer reductions will be coordinated with the CPM and CDFW~~

~~[1] For species listed under two or more categories, the number of categories is indicated in parentheses, e.g., "red-tailed hawk (2)."~~

~~[2] In consultation with the Avian Designated Biologist, the monitor may implement reduced buffers which will take into consideration the species, their life history, individual sensitivity to noise, vibration and disturbance, site conditions etc.~~"

Page 5.2-271, COC BIO-18, paragraph 1 – Please revise text as follows:

> "The project owner shall install bird flight diverters or other suitable aerial markers on the ~~transmission line~~ **generation tie-line** in all areas within 5-miles of Swainson's hawk nests. Aerial markers shall be approved by the CPM in consultation with CDFW."

Page 5.2-271, COC BIO-18, Verification, paragraph 1 – Please revise text as follows:

> "The project owner shall identify which section of the ~~transmission line~~ **generation tie-line** is 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 construction report to the CPM and CDFW no more than 30 days after the placement of bird flight diverters or aerial markers has been completed."

Page 5.2-274, COC BIO-19, numbered item 5, paragraph 1 – Please revise text as follows:

> "If BUOW burrows cannot be avoided as described above, then the project owner shall follow BUOW Burrow Blockage, BUOW Burrow Excavation, and BUOW Mortality Reduction Plan as appropriate. If the approved DB ~~BUOW~~ determines BUOW are visibly stressed by project activities or by workers in the vicinity after these no-disturbance buffers are established, **the DB will immediately increase the no-disturbance buffer to a distance where visible stress is no longer observed.** ~~all work in the vicinity shall immediately cease and~~ **The** increased no-disturbance buffers will be ~~determined~~ **reviewed and approved** by the CPM**,** ~~and~~ CDFW**,** and the approved DB(s) based on their behavioral observations of the affected BUOW."

Page 5.2-274, COC BIO-19, numbered item 6 – Please revise text as follows:

"**BUOW Burrow Blockage.** If the CPM has approved a BUOW burrow blockage **of a known BUOW burrow**, the project owners DB shall block rather than destroy any unoccupied **known** BUOW burrow located within the buffer distances prescribed the BUOW Burrow Avoidance limits, 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 DB(s) has conducted four consecutive 24-hour periods of monitoring with infrared camera and determined that BUOW 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 DB or Designated Monitor(s) at least once every 48 hours **while the blockage is in place** to ensure that the exclusion material is still intact. If BUOW regains access to the burrow, Permittees 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."

Page 5.2-276, COC BIO-19, numbered item 11 – Please revise text as follows:

"**Vehicle Parking (Construction, Operation, & Maintenance).** During construction, operation, and maintenance activities or while implementing BUOW take minimization measures, the project owner shall not allow vehicles to park on top of known or potential BUOW burrows. Vehicles left overnight shall not be located within 50 feet of BUOW (known ~~or potential~~) burrows. Workers shall inspect for BUOW under vehicles and equipment every time the vehicles and equipment are moved. If a BUOW is present, the worker shall wait for the BUOW to move unimpeded to a safe location. Alternatively, the approved Designated Biologist(s) shall be contacted to passively encourage the BUOW to move away from the vehicle or equipment, in compliance with the timing and methods identified in the BUOW Mortality Reduction Plan."

Page 5.2-278, COC BIO-20, numbered item 1, paragraph 1 – Please revise text as follows:

"**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 to the CPM and CDFW identifying all potential nesting habitat in or within 0.25-miles of proposed disturbance areas during construction. On**c**~~e~~ round of protocol surveys will be completed within 5-miles of the ~~transmission line~~ **generation tie-line** corridor, **unless otherwise prohibited due to legal access or safety issues,** to assist in the location where aerial makers 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 0.25 miles of project disturbance areas including but not limited to wind WRESC site, access roads, lay down areas, and ~~transmission line~~ **generation tie-line** alignment where active construction is proposed."

Page 5.2-278, COC BIO-20, numbered item 3 – Please revise text as follows:

"**Nest Detection.** If ~~a territory or~~ **an active or occupied** nest is confirmed during the surveys within 0.25 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 0.25-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 will remain in place until the DB has verified that the nest is no longer active or occupied.** 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. Nest locations shall be mapped using GPS technology and provided to the CPM."

Page 5.2-279, COC BIO-21 – Please revise this condition to reflect that small mammals will be opportunistically salvaged when encountered. Please revise the text as follows:

~~The Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys for Tulare grasshopper mouse, Tehachapi pocket mouse, San Joaquin pocket mouse, 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.~~

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

   ~~Surveys shall encompass work areas and a 250-foot buffer for ringtail and 50- feet for pocket mice, unless otherwise prohibited due to legal access or safety issues. Any observations of ringtail individuals, sign (e.g., tracks, scat, fur patches), or active natal dens will be recorded using a precision GPS unit and included on maps. In addition, a survey shall be conducted no more than 72 hours prior to commencing activities and a clearance survey conducted the morning of proposed work to search for the presence of active ringtail den sites or high concentrations of small mammals in or near proposed work areas.~~

2. If Natal Dens are Detected. If an active ringtail natal den is **incidentally** identified, a 250-foot avoidance buffer will be established by the qualified biologist using staking, flagging, or other conspicuous materials and no project activities will be permitted. The buffer may be adjusted in by the qualified biologist(s) in coordination with the CPM and with the concurrence of the CDFW based on location, specific site conditions, and proposed work activities. The avoidance buffer will only be removed once the qualified biologist(s) confirms that the young have left the den or the den has been naturally abandoned or failed.

Page 5.2-280, COC BIO-21, numbered item 3 – Please revise text as follows as the removed information is captured under COC BIO-22:

"**Notification of Detection.** The project owner or Designated Biologist shall notify the CPM, CDFW, and USFWS within 24-hours if ~~a~~n ~~American badger, desert kit fox,~~ California wolverine, fisher, ringtail, 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, in coordination with CDFW, will provide guidance for further action as appropriate to the species."

Page 5.2-280, COC BIO-21, numbered item 5 – Please revise text as follows:

> "~~Salvage of Pocket Mice. During initial grading the biologist will make every effort to salvage incidentally encountered 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.~~"

Page 5.2-282, COC BIO-22, numbered item 3 – Please revise text as follows:

> "**Passive Relocation.** If **confirmed active** dens cannot be avoided, the project owner shall submit an American Badger and Desert Kit Fox Eviction Plan to the CPM for approval and the CDFW for concurrence. The American Badger and Desert Kit Fox Eviction Plan shall include details of eviction activities outside the pupping season, including at a minimum the following: methods and materials used for construction and maintenance of eviction via one-way doors; the use of continuous camera monitoring of dens for at least five consecutive days to ensure that American badger or desert kit fox are not trapped; specific timing of eviction activities; design, methods, and materials used for construction and maintenance of artificial burrows and/or location and discussion of preexisting, suitable, and unoccupied dens available; details of den collapse methods; 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 will be evaluated on a case-by-case basis in coordination with the CPM in consultation with the CDFW."

Page 5.2-283, COC BIO-23, paragraph 1 and 2 – Please revise text as follows:

> Designated Biologist and/or Biological Monitor(s) shall conduct pre-construction surveys for Mohave ground squirrel ~~if the most recent surveys were performed more than a year~~ prior to the start of any ground-disturbing activities. Surveys shall be conducted by qualified biologists approved by the CPM in coordination with CDFW, pursuant to **BIO-1** and/or **BIO-3.**
>
> Surveys. ~~To confirm the status of non-occupancy~~ the Designated Biologist shall conduct **pre-clearing** camera or live trapping prior to any ground-disturbing or vegetation removal activities that will occur in suitable habitat, ~~following survey protocols approved by the CPM in coordination with CDFW~~. ~~Trapping would be required for the WREC 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. Any observations will be recorded using a precision GPS unit and included on maps.

Page 5.2-285, COC BIO-24, numbered item 2 – Please revise text as follows:

> "**Provide Maps of Proposed Disturbance Areas. T**he 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 ~~transmission line~~ **generation tie-line** poles, staging areas, pull and tensioning sites, or other work areas. Maps of all proposed temp and permanent work areas shall be provided to the CPM 30 days prior to any site disturbance. 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. This data shall be provided to the CPM no more than 30 days following the cessation of construction along the ~~transmission line~~ **generation tie-line**."

Page 5.2-285, COC BIO-24, numbered item 4 – Please revise text as follows:

~~"Daily Clearance Survey. Before the start of daily project activities, the designated biologist shall survey the project area to ensure there is no wildlife incidentally trapped due to project activities and all are allowed to escape on their own volition."~~

Page 5.2-286, COC BIO-24, numbered item 5.d – Please revise text as follows:

"Work in Dry Weather. The National Weather Service 72-hr forecast for the project area shall be monitored. Project activities within drainages shall be restricted if the forecast predicts a 4**6**0% chance or more of a greater than ¼-inch of precipitation event within a 24-hour period, **unless otherwise approved by the CPM**. 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."

Page 5.2-286, COC BIO-24, numbered item 5.h – Please revise text as follows:

~~"Disturbed Soils. Disturbed soils shall be stabilized to reduce erosion potential. Planting, seeding with sterile native species (especially those species that support California native pollinators), and mulching is acceptable. Where suitable vegetation cannot reasonably be expected to become established, non-erodible materials, such as coconut fiber matting, shall be used for stabilization."~~

Page 5.2-287, COC BIO-24, numbered item 5.m – Please revise text as follows:

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

Page 5.2-287, COC BIO-24, numbered item 5.q – Please revise text as follows:

"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. ~~In addition, equipment shall be cleaned daily to ensure non-natives are not introduced into or spread throughout project sites."~~

Page 5.2-290,291, COC BIO-24, numbered item 8 – Please revise text as follows:

~~**"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.

g. **Seed and Mulch.** Upon completion of construction operations and/or the onset of wet weather, stabilize exposed soil areas within the work area by applying mulch and seed. Restore all exposed or disturbed areas and access points within a stream and riparian zone by applying local native and weed free erosion control grass seeds. Locally native wildflower and/or shrub seeds may also be included in the seed mix. Mulch restored areas using at least two to four inches of weed-free clean straw or similar biodegradable mulch over the seeded area. Alternately, cover seeding with jute netting, coconut fiber blanket, or similar non-synthetic monofilament netting erosion control blanket."

Page 5.2-291, COC BIO-24, numbered item 11.a – Please revise text as follows:

"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 COC **BIO-14** support a minimum of 3:1 ratio for any permanent impacts and 1:1 for temporary impacts."

Cultural and Tribal Cultural Resources

Page 5.4-145, COC CUL/TRI-1, Verification, paragraph 1 – Please revise text as follows:

"The project owner shall submit the prospective CRS's and any Alternate CRS's qualifications at least 75 **30** days prior to the start of ground disturbance associated with site mobilization and construction".

Page 5.4-146, COC CUL/TRI-2, paragraph 1 – Please revise text as follows:

"COC CUL/TRI-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** 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".

Page 5.4-147, CUL/TRI-2, Verification, paragraph 1 – Please revise text as follows:

"At least ~~40~~ **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".

Page 5.4-151, COC CUL/TRI-4, Verification, paragraph 1 – Please revise text as follows:

"At least ~~30~~ **15** 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".

Page 5.4-151, COC CUL/TRI-5, paragraphs 1 and 2 – Please revise text as follows:

"The project owner shall ensure that a CRS, alternate CRS, or CRM and Native American Monitor shall be on site for any ground disturbance **in native soils** associated with construction of the project.

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 **from native soils** 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".

Page 5.4-158, COC CUL/TRI-8 – Missing text for Verification – Please see the suggested language as follows:

"**Verification: If project plans change to include additional areas that were unable to be surveyed or sites that were not formally evaluated, the CPM will be notified within 30 days of any additional survey or evaluations conducted**".

Geology, Paleontology, and Minerals

Page 5.6-52, COC, Introduction – Please revise text as follows:

"The following COCs are proposed for Geology, Minerals, and Paleontology for the proposed project. Descriptions of COCs **GEN-1**, **CIVIL-1**, and **STRUC-1** are in Section 4.1, Facility Design. Descriptions of COCs **WATER-1**, **WATER-2** and **WATER-5** are in Section 5.16, Water Resources."

Page 5.6-58, COC PAL-3 – Please revise text as follows:

> "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."
>
> "8. Procedures to inventory, prepare, and deliver fossil materials **the PRS deems 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."

Page 5.6-54. COC Geo-2 – Please remove the following item from the condition:

> "~~Norwegian Tunneling Society Publication 16: Underground Constructions for the Norwegian Oil and Gas Industry~~."

Page 5.6-53. COC Geo-3 - Please remove this condition:

> "~~Integrity inspections of underground structures, including the cavern and vertical shafts, shall be performed at least annually. Inspections and maintenance of underground structures shall be performed under the responsible charge of, and signed off by, an appropriate qualified California licensed geologist or engineer~~".

Hazards, Hazardous Materials/Waste and Wildfire

Page 5.7-34, COC HAZ-3 – Please revise text as follows:

> "The project owner shall report new or temporary hazardous waste generator **EPA** identification numbers from the **California Department of Toxic Substances Control** ~~EPA~~ prior to generating any hazardous waste during demolition, construction, or operations."

Page 5.7-34, COC HAZ-5, first paragraph – Please revise text as follows:

> "The project owner shall also prepare site-specific security plan for the ~~commissioning and~~ operational phase~~s~~ that would be available to the CPM for review and approval.

Land Use, Agriculture, and Forestry

Page 5.8-28, COC LAND-1, second paragraph – Please revise text as follows:

> "Prior to the commencement of construction, the project owner shall ~~obtain any necessary permits from~~ **pay Kern County fees for review and comment and demonstrate compliance with requirements of** the Kern County Planning and Natural Resources Department, or other relevant departments, for development of temporary laydown and parking areas".

Page 5.8-29, COC LAND-1, Verification – Please revise text as follows:

> "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~~ **documentation showing payment of Kern County fees for review and comment and demonstrating compliance with requirements of** the Kern County Planning and Natural Resources Department, or any other relevant departments"

Page 5.8-29, COC LAND-2 – Please revise text as follows:

> "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".

Page 5.8-29, COC LAND-2, Verification – Please revise text as follows:

> "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".

Page 5.8-29, COC LAND-3 – Please revise text as follows:

> "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".

Page 5.8-29, COC LAND-3, Verification – Please revise text as follows:

> "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".

Page 5.8-30, COC LAND-4 – Please revise text as follows:

> "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".

Page 5.8-30, COC LAND-4, Verification – Please revise text as follows:

> "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, and** construction of any new or relocated transmission poles that have not yet received Determinations. At least 30 days prior to construction **of structures, erection of construction equipment or new transmission poles subject to the FAA's 7460-1 process**, the project owner shall **for the facilities to be constructed or erected** provide to the CPM copies of ~~all~~ FAA Determinations".

Noise and Vibration

Page 5.9-12, COC NOISE-4, paragraph 1 – Please revise text as follows:

> "The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that noise **levels measured at NSA-1 during operation of the project** ~~due to the operation of the project~~ will not exceed **55 dBA Leq during the daytime period or 54 dBA Leq during the nighttime period**~~50 dBA Leq at NSA-1~~."

Page 5.9-13, COC NOISE-6, paragraph 1 – Please revise text as follows:

> "Heavy equipment operation and noisy construction work relating to any **above-ground** construction project features, including linear facilities and pile driving within 1,000 feet of an occupied residential dwelling, and ~~blasting~~ **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." |

Solid Waste Management

Page 5.12-9, COC SOLID WASTE-1 – Please revise text as follows:

> **"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; and
> - 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."**

Transportation

Page 5.14-23, COC TRANS-1 – Please revise text, clarifying reviews, and moving implementation language from the condition to the Verification, as follows:

> "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.**
>
> ~~The CTMP shall include TDM measures to reduce project-generated VMT during construction. The CTMP should outline VMT reduction measures such as:~~

- ~~Provide lodging for specialized workers 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.~~"

Page 5.14-24, COC TRANS-1, Verification – Please revise text as follows:

"**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 compliance project manager (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, such as the following:

- **Provide information regarding lodging to 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.**"

Page 5.14-24, COC TRANS-2, Verification – Please revise text as follows:

"The project owner shall ensure that all proposed site access and parking improvement plans for both the construction and operation phases are ~~reviewed and approved by~~ **submitted to** Kern County and Caltrans **for review and comment and to the CPM for review and approval** before construction begins."

Page 5.14-24 COC TRANS-4 – Please revise text as follows:

"TRANS-4 The project owner shall ensure that ~~are~~**its contracts with third party vendors include a representation that any** permits and/or licenses **will be** secured from the relevant administering agency, including Kern County, Caltrans, and CHP for the transport of hazardous materials.

Page 5.14-24 COC TRANS-4, Verification – Please revise text as follows:

"The project owner shall include in its monthly compliance reports copies of all permits/licenses acquired by ~~the project owner and/or subcontractors~~ **vendors** concerning the transport of hazardous substances."

Visual Resources

Page 5.15-53, COC VIS-1 – Please revise text as follows:

"**Based on established best practices to minimize visual impacts from development, t**~~T~~he 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, 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. **Structures that have functional requirements or safety considerations that preclude painting, finishing, or coating should be identified.**

2. 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. **The identification of colors will be established through an onsite study for the selection of appropriate colors compatible with the surrounding landscape and may reference the existing BLM Standard Environmental Color Chart. Color choices should be tested experimentally under field conditions before large-scale implementation.**

3. A time schedule for the completion of the application/installation of the coating, color, finish, and materials.

4. 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".

Water Resources

Page 5.16-15, COC WATER-1 – Please include new additions to text as follows:

"WATER-1 The project owner shall manage stormwater pollution from the site and related facilities during project construction activities by fulfilling the requirements contained in State Water Resources Control Board's NPDES Construction General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit or CGP) (Order No. 2022-0057-DWQ, NPDES No. CAS000002) and all subsequent revisions and amendments. Among the requirements of the CGP, the project owner shall file permit registration documents electronically using the Stormwater

Multiple Applications and Report Tracking Systems (SMARTS), submit a Notice of Intent (NOI), and develop and implement a construction Stormwater Pollution Prevention Plan (SWPPP) for the construction of the project. The construction SWPPP shall include all applicable best management practices (BMPs) for the project construction activities conducted in the local environment. The SWPPP must be prepared by a State-Qualified SWPPP Developer (QSD).

The following requirements apply to potential fill and excavation discharges associated with construction of the gen-tie line:

1. **The authorized impacts to ephemeral streams total 0.11 acres and 1,705 linear feet.**
2. **The Applicant must restore the impacted areas by regrading to pre-project contours and revegetating with an appropriate native seed mix.**
    a. **Adaptive measures such as reseeding, supplemental irrigation, and removal of non-native plant species must be taken to promote success of the revegetation.**
    b. **Annual monitoring of the restored areas must continue until all the revegetation success criteria have been met.**
    c. **Revegetation success criteria are:**
        i. **At least 70% vegetation cover of native species;**
        ii. **Less than 5% vegetation cover of non-native species; and**
        iii. **Absence of rills and other signs of erosion.**

There are no permanent impacts, therefore compensatory mitigation is not required".

Page 5.16-16, COC WATER-1, Verification – Please include new additions to text as follows:

"At least thirty (30) days prior to site mobilization, the project owner shall submit to the Lahontan Regional Water Quality Control Board (LRWQCB) the construction SWPPP for review and comment and to the Compliance Project Manager (CPM) for review and approval. Within five days of generating or receiving a correspondence with the LRWQCB, the project owner shall provide the correspondence to the CPM. The Project owner shall notify the CPM in writing of any notices of violation issued by LRWQCB within 24 hours of receiving the notice of violation. Any monitoring documentation shall be included in the annual compliance report.

At least thirty (30) days prior to construction of the gen-tie line, the project owner shall submit to the CPM for review and approval and to LRWQCB for review and comment all plans to control the potential for fill and excavation discharges of wastewater associated with construction of the gen-tie line."

Page 5.16-16, COC WATER-2, Heading – Please revise text as follows:

"**OPERATION** ~~CONSTRUCTION~~ EROSION AND SEDIMENTATION PLAN ~~OPERATIONS~~ DRAINAGE, EROSION AND SEDIMENTATION PLAN"

Page 5.16-16, COC WATER-2 – Please revise text as follows:

> **"WATER-2** Prior to commencing project operations, the project owner shall obtain CPM approval of a site-specific Drainage, Erosion and Sedimentation Plan (DESCP) that addresses all project elements of stormwater management during project operations. The DESCP shall include the following:
>
> - Discussion, site maps, plans and applicable BMPs demonstrating how stormwater and sediment erosion shall be managed during ~~plant~~ **project** operations.
> - Discussion of BMPs deployment and materials management practices at the project site.
> - Discussion and schedule of BMP inspections, storm event monitoring, and stormwater management structure maintenance.
>
> The DESCP should also describe how ~~the impact of~~ offsite stormwater diverted around the project facility and discharged along Dawn Road and Sierra Highway to local drainages shall be addressed."

Page 5.16-16, COC WATER-2, Verification – Please revise text as follows:

> "**Verification:** At least thirty (30) days prior to project operation, the project owner shall submit a copy of the Operations DESCP to the CPM for review and approval. The project owner shall notify the CPM in writing of any reported non-compliance and include these in the annual compliance report. Any monitoring documentation associated with the DESCP shall be included in the annual compliance report. **The NOI filed for the CGP for WATER-1 may be submitted in lieu of a DESCP if the CPM determines that the NOI addresses all of the requirements of this Condition.**"

Page 5.16-17, COC WATER-3, Heading – Please revise text as follows:

> "~~GENERAL~~ WDRs FOR LOW THREAT TO WATER QUALITY DISCHARGES**: DRILL CUTTINGS POND**"

Page 5.16-17, COC WATER-3, Paragraph 2 – Please revise text as follows:

> "The project owner shall comply with the Waste Discharge Requirements (WDRs) established in Attachment A for the construction and operation of the drill~~ing~~ cuttings ponds."

Page 5.16-17, COC WATER-3, Verification – Please revise text as follows:

> "**Verification** At least sixty (60) days prior to construction **drill cuttings pond**, the project owner shall submit to LRWQCB all necessary information and applicable fees, submitting copies of all application submittals to the CPM. 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 about the SWRCB Order for 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. **The project owner shall also file reports as required the Section F, "Reporting Requirements," in Attachment A.**"

Page 5.16-18, COC WATER-4 – Please revise text as follows:

> "**WATER-4** 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 ~~steams~~ **streams** are disposed in accordance with Federal, State and local regulations, the project owner shall document all aspects of offsite wastewater disposal."

Page 5.16-19, COC WATER-6, Dam Safety Program Requirements, bullet 4 – Please revise text as follows:

"The project owner shall pay ~~application and~~ annual fees, in accordance with the Dam Safety Program Requirements."

Page 5.16-19, COC WATER-6, Dam Safety Program Requirements, bullet 5 – Please revise text as follows:

"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. **The project owner shall coordinate with the CPM and DWR-DSOD to determine how to properly account for the project's underground storage capacity, which means that water below ground surface will not travel offsite under any circumstances.**"

Page 5.16-19, COC WATER-6, Dam Safety Program Requirements, bullet 6 – Please revise text as follows:

"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 owner shall coordinate with the CPM and DWR-DSOD to determine how to properly account for the project's underground storage capacity in developing the inundation map and emergency action plan requirements.**"

Page 5.16-20, COC WATER-6, Paragraph 4 – Please revise text as follows:

"The project owner shall obtain DSOD approval of dam plans and specifications prior to commencing construction **of the HC-reservoir embankment** in accordance with CWC Section 6200. The project owner shall provide the 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."

Page 5.16-20, COC WATER-6, Paragraphs 5 and 6 – Please revise text as follows:

"Following the conclusion of milestone 7, DSOD would approve the design application and conditions **of the HC-reservoir embankment**, 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 DSOD **written notice that DSOD would issue an** approval **but for the Commission's exclusive jurisdiction** (CWC Section 6265) **or such other date as the CPM may approve.**"

Page 5.16-21, COC WATER-6, Dam Safety Program Requirements, Verification Paragraph 3 – Please revise text as follows:

> "The project owner shall provide evidence to the CPM of payment to DWR-DSOD of all **annual** fees required under the Dam Safety Program Requirements within 10 days of payment."

Page 5.16-21, COC WATER-7– Please revise text as follows:

> "**WATER-7** ~~The coordination between the CEC and the DSOD during HC-reservoir embankment construction introduces a unique working relationship for both State agencies.~~ The CEC delegates inspection of the HC-reservoir embankment construction with respect to engineering design to the DSOD, with onsite consultation with the DCBO and ongoing guidance from the CPM.
>
> The ~~DCBO~~ **CPM** shall have oversight responsibility of the entire project but shall defer oversight of the hydrostatic compensation reservoir system to the **DCBO and** DSOD inspection team up to the reservoir sump/water intake per the reservoir grading plan (Kiewit 2024).
>
> Before submitting the ~~initial~~ **30%** engineering designs for **the HC-reservoir embankment 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 **for the HC-reservoir embankment** to the DSOD and the DCBO."

Page 5.16-21, COC WATER-7, Verification – Please revise text as follows:

> "At least 60 days (or a project owner, DCBO and DSOD mutually agreed upon alternative time frame) prior to the start of ~~rough grading~~ **construction of the HC-reservoir embankment**, the project owner shall submit to the DSOD, DCBO and CPM the schedule, and the master drawings and master specifications list of documents for **the HC-reservoir embankment for** review and approval.
>
> These documents shall be the pertinent design documents for the major structures, systems, and equipment defined above in Condition of Certification **WATER-6**.
>
> Major structures and equipment shall not be added to or deleted from the list without CPM 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 certify the HC-reservoir embankment to store water with CPM concurrence.
>
> Filling of the HC-reservoir **above the toe of the HC-reservoir embankment** shall not commence until the DSOD has certified that the HC-reservoir is suitable to store water (CWC Section 6355).
>
> The project owner shall submit all correspondence and results of DSOD regular inspections during project operations."

Page 5.16-22, COC WATER-8 – Please revise text as follows:

> "Supply of ~~fresh~~ water for the project construction **and operations** 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 **AVEK water supply** ~~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~~."

COMPLIANCE CONDITIONS AND COMPLIANCE MONITORING PLAN

Page 9-9, COC COM-1 – Please revise text as follows:

"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."

Page 9-9, COC COM-2 – Please revise text as follows:

"**COM-2 Compliance Record.** The project owner shall maintain electronic copies of all project files and submittals **related to CEC license compliance** 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 **post-certification** amendment petitions and CEC orders;
3. all **post-certification** site-related environmental impact and survey documentation;
4. all **post-certification** 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."

Page 9-9, COC COM-3 – Please revise text as follows:

"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."

Page 9-10, COC COM-4 – Please revise text as follows:

"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, c~~**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."

Page 9-13, COCCOM-11 – Please revise text as follows:

"**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 **consistent with the requirements of section 1769**. 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."

Page 9-14, COC COM-13 – Please revise text as follows:

> **"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 **consistent with any changes in applicable law**. 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;"

Page 9-18, COC COM-16 – Please revise text as follows:

> **"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 and Cost Estimate**
>
> a. No less than one year (or other CPM-approved date) prior to initiating a permanent facility closure, or upon an order compelling permanent closure, the project owner shall submit for CEC review and approval a Final Closure Plan and Cost Estimate, which includes any site maintenance and monitoring.
>
> Prior to submittal of the facility's Final Closure Plan to the CEC, the project owner and the CPM will hold a meeting to discuss the specific contents of the plan. ~~If significant issues are associated with the plan's approval, the CPM will hold one or more workshops and/or the CEC may hold public hearings as part of its approval procedure.~~
>
> b. Final Closure Plan ~~and Cost Estimate~~ contents include, but are not limited to:
>
> 1. a statement of specific Final Closure Plan objectives;
>
> 2. a statement of qualifications and resumes of the technical experts proposed to conduct the closure activities, with detailed descriptions of previous power plant closure experience;
>
> 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 ~~and itemized budget~~ for permanent plant closure and site maintenance activities, with a description and explanation of methods to be used, broken down by phases, including, but not limited to:
>
> a. dismantling and demolition;
>
> b. recycling and site clean-up;

c. impact mitigation and monitoring;

d. site remediation and/or restoration;

e. exterior maintenance, including paint, landscaping and fencing;

f. site security and lighting; and

g. any contingencies.

~~5. a final cost estimate for all closure activities, by phases, including:~~

~~a. monitoring and maintenance costs, and long-term equipment;~~

~~b. replacement;~~

6. a schedule projecting all phases of closure activities for the power plant site and all appurtenances constructed as part of the CEC-certified project;

7. an electronic submittal package of all relevant plans, drawings, risk assessments, and maintenance schedules and/or reports, including an above and below- ground infrastructure inventory map and registered engineer's or DCBO's assessment of demolishing the facility;

8. additionally, for any facility that permanently ceased operation prior to submitting a Final Closure Plan **~~and Cost Estimate~~** and for which only minimal or no maintenance has been done since, a comprehensive condition report focused on identifying potential hazards;

9. all information additionally required by the facility's COCs applicable to plant closure;

10. 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.

11. a site disposition plan, including but not limited to proposed rehabilitation, restoration, and/or remediation procedures, as required by the COC and applicable LORS, and site maintenance activities;

12. 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

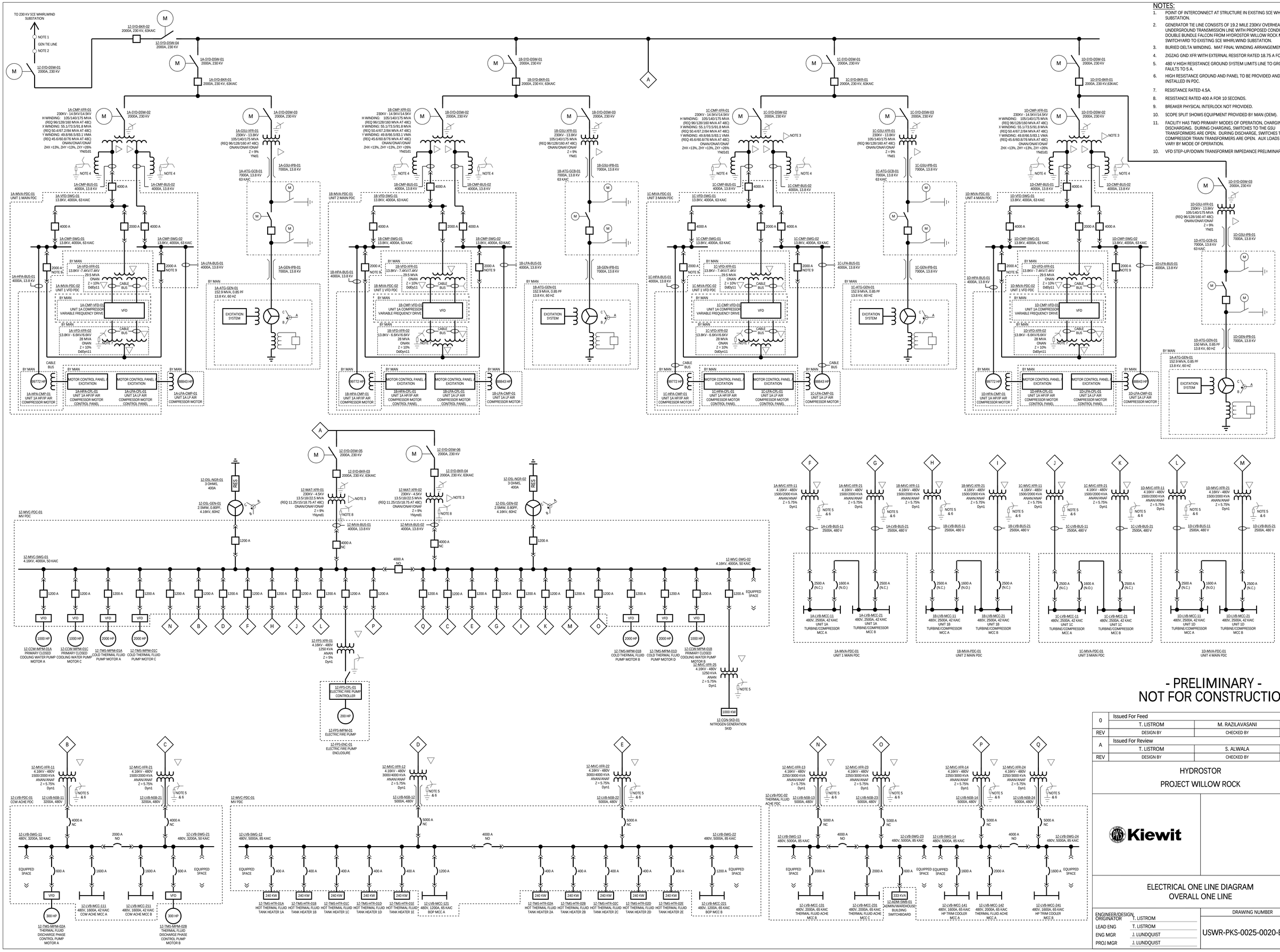
h. contaminated soil;

13. identification of all current COC, LORS, federal, state, regional, and local planning efforts applicable to the facility, and
14. proposed strategies for achieving and maintaining compliance during closure;
15. updated mailing list and Listserv of all responsible agencies, potentially interested parties, and property owners within one mile of the facility;
16. ~~identification of alternatives to plant closure and assessment of the feasibility and environmental impacts of these; and~~
17. 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 ~~and Cost Estimate~~ 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."

APPENDIX B

Revised One-Line Diagram



NOTES:

1. POINT OF INTERCONNECT AT STRUCTURE IN EXISTING SCE WHIRLWIND SUBSTATION.
2. GENERATOR TIE LINE CONSISTS OF 19.2 MILE 230KV OVERHEAD/ UNDERGROUND TRANSMISSION LINE WITH PROPOSED CONDUCTOR DOUBLE BUNDLE FALCON FROM HYDROSTOR WILLOW ROCK MAIN SWITCHYARD TO EXISTING SCE WHIRLWIND SUBSTATION.
3. BURIED DELTA WINDING. MAT FINAL WINDING ARRANGEMENT POST FEED.
4. ZIGZAG GND XFR WITH EXTERNAL RESISTOR RATED 18.75 A FOR 5 SECONDS.
5. 480 V HIGH RESISTANCE GROUND SYSTEM LIMITS LINE TO GROUND FAULTS TO 5 A.
6. HIGH RESISTANCE GROUND AND PANEL TO BE PROVIDED AND INSTALLED IN PDC.
7. RESISTANCE RATED 4.5A.
8. RESISTANCE RATED 400 A FOR 10 SECONDS.
9. BREAKER PHYSICAL INTERLOCK NOT PROVIDED.
10. SCOPE SPLIT SHOWS EQUIPMENT PROVIDED BY MAN (OEM).
11. FACILITY HAS TWO PRIMARY MODES OF OPERATION, CHARGING AND DISCHARGING. DURING CHARGING, SWITCHES TO THE GSU TRANSFORMERS ARE OPEN. DURING DISCHARGE, SWITCHES TO THE COMPRESSOR TRAIN TRANSFORMERS ARE OPEN. AUX LOADS ALSO VARY BY MODE OF OPERATION.
10. VFD STEP-UP/DOWN TRANSFORMER IMPEDANCE PRELIMINARY.

- PRELIMINARY - NOT FOR CONSTRUCTION

0	Issued For Feed		
	T. LISTROM	M. RAZILAVASANI	05-06-25
REV	DESIGN BY	CHECKED BY	DATE
A	Issued For Review		
	T. LISTROM	S. ALWALA	03-04-25
REV	DESIGN BY	CHECKED BY	DATE

HYDROSTOR

PROJECT WILLOW ROCK

Kiewit

ELECTRICAL ONE LINE DIAGRAM
OVERALL ONE LINE

ENGINEER/DESIGN ORIGINATOR	T. LISTROM
LEAD ENG	T. LISTROM
ENG MGR	J. LUNDQUIST
PROJ MGR	J. LUNDQUIST

DRAWING NUMBER

USWR-PKS-0025-0020-EO-0001

APPENDIX C

Updated Visual Simulations

UPDATED VISUAL SIMULATIONS

In April of 2025, the California Energy Commission (CEC) staff provided a Preliminary Staff Assessment (PSA) of the Supplemental Application for Certification (AFC) of the Willow Rock Energy Storage Center (WRESC, the Project) proposed by the Applicant within southeastern Kern County, California. Within the PSA, CEC staff provide independent analysis and conclusions for technical sections of the Supplemental AFC and proposed related Conditions of Certification. This included a CEC staff assessment of Section 5.13 (Visual Resources) of the AFC.

Section 5.13 of the Supplemental AFC included a visual assessment of the Project following CEC guidelines for preparing visual impact assessments for AFCs and requirements of the California Environmental Quality Act (CEQA). The technical approach for analysis provided in Section 5.13 of the AFC was based on established guidance for conducting visual impact assessments such as from the Bureau of Land Management's (BLM) visual resource management system. The application of this approach within the Supplemental AFC is intended to provide a meaningful evaluation of the following key elements of professional visual impact assessments:

- current condition of the visual environment and viewing conditions surrounding the proposed Project site,
- illustration of the proposed Project within current visual conditions using landscape simulation, and
- analysis of the potential for visual impacts from the proposed Project to the visual quality or character of the landscape, and the related visual experience of persons viewing the landscape.

The PSA of the Supplemental AFC included an evaluation of the Projects potential visual impacts using an adapted methodology that experienced CEC staff have developed internally based on a range of establish formal visual assessment systems and research that is understood to be for the purposes of assessing visual impacts in compliance with CEQA and CEQA guidelines. The workflow of this methodology was provided in the PSA in Section 5.15 and its implementation was detailed in a number of evaluation worksheets that were provided for a subset of four of the seven representative Key Observation Points (KOPs) provided in Section 5.13 of the Supplemental AFC. CEC staff assessed an overall significant and unavoidable impact related to the proposed Project's ability to substantially degrade the existing visual character or quality of public views of the site and its surroundings. It is acknowledged that the focus in the CEC staff's assessment was on physical aesthetic changes to the existing physical environment caused by the proposed Project.

The CEC staff assert that given the physical environment of the Project site, the Project cannot be effectively camouflaged, disguised, or treated with exterior coatings, colors, or finishes to mitigate the degrading of the existing visual character or quality of the public view of the site and its surroundings. Best management practices (BMPs) established by the BLM related to color and concealment are available to specifically guide the use of exterior coatings, colors, or finishes to reduce contrast with the existing landscape (i.e., Best Management Practices for Reducing Visual Impacts Associated with Renewable Energy Facilities on BLM-Administered Lands, BLM Technical Note 446 – The Use of Color for Camoflage Concealment of Facilities). These BMPs are developed for a range of diverse physical environments throughout the U.S., including the arid desert environment that surrounds the Project.

Within the PSA, CEC staff identified the VIS-1 Condition of Certification which details that 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. This more specifically includes exterior surface coating, color, finish, material, and gloss level that minimize contrast and do not introduce specular reflection in the existing physical landscape.

The objective of the information provided in this submission is to present updated images of the Project with the application of VIS-1 that are consistent with relevant BMPs from BLM on color and concealment to illustrate the effectiveness of this mitigation to reduce the visual impacts of the Project. Consistent with the Applicant's respect for the CEC Staff's analysis approach and draft findings, the information presented here is intended to demonstrate that the Project can be effectively camouflaged, disguised, or treated with exterior coatings and colors to mitigate the potential impacts to the existing visual character or quality of the public's view of the physical environment of the Project site.

METHODS

Within the Supplemental AFC, the Applicant provided initial landscape photographs and simulations of the Project from seven KOPs in Appendix 5.13A. As the Project design at the time of submission of the Supplemental AFC did not include detailed exterior color selection, simulations focused on showing the form and character of the Project components. The color of the Project components' exterior surface in these simulations was presented as a monochromatic palette of light tan.

Consistent with BLM Technical Note 446, the simulations for the KOPs have been revised to visualize how various color combinations of exterior surface treatments will look against the backdrop of the existing landscape. Using the images of the Project site and surrounding environment in Appendix 5.13A, colors were selected from the BLM Standard Environmental Color Chart that would blend with the existing landscape. Specific single-color treatments were selected for individual Project components that are predicted to be most appropriate. For the Project facility site components, this consists of the following:

- Tanks – Carob Brown
- Ancillary Equipment – Shadow Gray
- Buildings – Carlsbad Canyon or Covert Green depending on the individual buildings, and
- Bare soil of the Project footprint and berm option – Carlsbad Canyon

The selected colors for the Project facility site are presented in Figure 1.

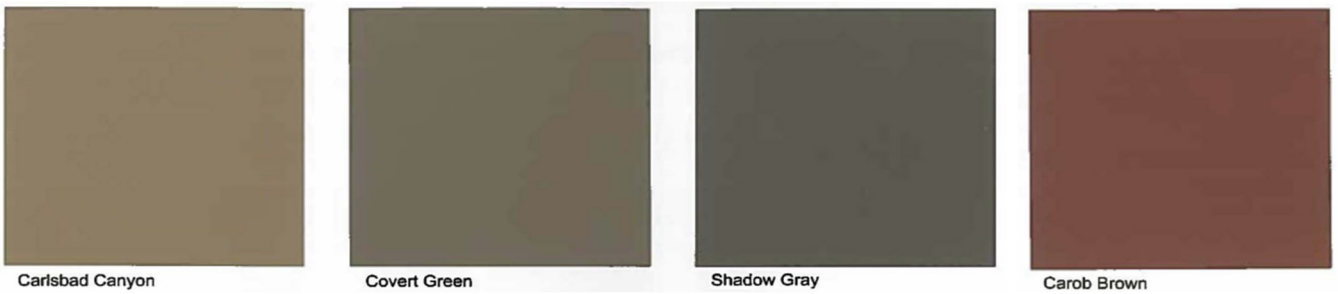


Figure 1: Selected Standard Environmental Colors for Project Facility Site

Source: BLM Standard Environmental Colors Chart

For the Project transmission structures, two options were developed that were intended to blend the monopoles for the Project's transmission line with the existing landscape. This included the following color selections:

- A dark brown for the weathered steel structures option to mimic color of adjacent weathering steel monopoles, or

- A dark, earthy green (similar to BLM Standard color Juniper Green) with a vertical gradient to a lighter grey or white. Vertical paint color schemes are used for large vertical structures, such as wind turbines, as they provide blending for lower portions against a backdrop of earth or vegetation, while the light upper portions blend with the sky or clouds.

Of course, the selection of these colors is not based on detailed site evaluation and has not been field tested on the Project site in a range of lighting conditions. They are presented here to illustrate the potential effectiveness of color as a tool for visual mitigation of predicted Project effects.

Using Photoshop image editing software, the simulations for all seven KOPs were updated to include an accurate approximation of the selected colors which were calibrated to match with the viewing conditions present in the images for each KOP. The results of the application of the colors to each KOP are presented in Figures 2 to Figure 14[1].

Some of these images were presented at the Willow Rock PSA Workshop held on June 5, 2025 and discussed with CEC staff. Confirmation of the provision of additional simulations and options to present in this submission were confirmed with CEC staff at the Willow Rock PSA Workshop on June 10, 2025.

[1] High resolution photos of Figures 2 to 14 will be provided to CEC via Kiteworks.

Figure 2: KOP 1. State Route 14 Northbound (Simulated Condition with Exterior Color Treatment Mitigation)

Figure 3: KOP 2. Sierra Highway (Simulated Condition with Exterior Color Treatment Mitigation)

Figure 4: KOP 3. 10th Street West (Simulated Condition with Exterior Color Treatment Mitigation - No-berm Option)

Figure 5: KOP 3. 10th Street West (Simulated Condition with Exterior Color Treatment Mitigation - Berm Option)

Figure 6: KOP 4. Dawn Road (Simulated Condition with Exterior Color Treatment Mitigation)

Figure 7: KOP 5. Rosamond Blvd. West (Simulated Condition with Exterior Color Treatment Mitigation – Weathering Steel Structures)

Figure 8: KOP 5. Rosamond Blvd. West (Simulated Condition with Exterior Color Treatment Mitigation – Vertical Gradient)

Figure 9: KOP 6. Rosamond Blvd. East (Simulated Condition with Exterior Color Treatment Mitigation – Weathering Steel Structures)

Figure 10: KOP 6. Rosamond Blvd. East (Simulated Condition with Exterior Color Treatment Mitigation – Vertical Gradient)

Figure 11: KOP 6a. Rosamond Blvd. East (NW View) (Simulated Condition with Exterior Color Treatment Mitigation – Weathering Steel Structures)

Figure 12: KOP 6a. Rosamond Blvd. East (NW View) (Simulated Condition with Exterior Color Treatment Mitigation – Vertical Gradient)

Figure 13: KOP 7 Dawn Road East at SR 14 Offramp (Simulated Condition with Exterior Color Treatment Mitigation – No-berm Option)

Figure 14: KOP 7 Dawn Road East at SR 14 Offramp (Simulated Condition with Exterior Color Treatment Mitigation - Berm Option)

INFLUENCE OF MITIGATION

As the CEC staff acknowledge in the technical approach described in the PSA, visual elements vary in their contribution to the overall visual impact of a project, but color is a key element of visual contrast. In Table 7 of the worksheets provided by CEC staff, the weighting value for the color element is the highest of all the basic design elements assessed for visual contrast. As a result, it is expected that a change in the color of the Project components will have a pronounced effect on reducing the visual contrast.

From a review of the revised simulations presented in Figures 2 to Figure 14, it is proposed that the following changes to potential visual impacts of the Project are evident:

- The visual contrast of the Project within the surrounding landscape is reduced notably as the Project components blend with the general variety of hues of the natural environment.
- The range of color treatments adds visual diversity to the Project site that is reflective of the diversity within the natural environment surrounding the Project. This provides more unity with the overall visual character of landscape.
- The visual prominence of visible Project components is decreased as the overall form and line of features are less easily discernible, particularly with increased viewing distance. Reducing the visual contrast with the surrounding landscape is effective at reducing how notable the Project is as a focus of potential viewers' attention.
- For KOPs where the Project is viewed against a backdrop of earth and vegetation, the application of the selected colors is most effective at reducing the visual contrast of the Project as well as reducing the spatial dominance of the Project.
- Blending the Project's exterior surface colors with the existing landscape increases the potential for the Project to fit within the landscape relative to the ability of the landscape to accept human alterations.
- The physical change to the Project site is mitigable through the selection and application of appropriate exterior surface color to be less identifiable and represents a decrease in the potential magnitude of visual change. For most of the KOPs, the Project components may be evident within the view and appear as a relatively small alteration to the landscape. For some KOPs (e.g., KOP7), the Project components are more noticeable within the view and may appear as a distinct alteration to the landscape.
- The change to the physical conditions of the Project area resulting from the proposed Project facility and transmission structures would be less evident as degradation to the existing visual character or quality, particularly for public views that are beyond a 0.5-mile distance (e.g., foreground) as represented by most of the KOPs.

Based on the discussion during the PSA Workshops, the updated visual simulations of the views from all seven of the KOPs identified in Section 5.13 of the Supplemental AFC, as well as the information provided in this submission regarding the potential application and influence of VIS-1, the Applicant believes the Project's visual impacts would be mitigated to the degree that the overall alteration to the existing landscape would represent a less than significant effect.

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