

# **Southern California Edison's Valley South Subtransmission Project**

**Final Construction  
Completion Report**



**May 2021**

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# 1. Introduction and Project Overview

This Final Construction Completion Report has been prepared to summarize the construction and monitoring activities conducted for the Southern California Edison (SCE) Valley South Subtransmission Project (VSSP). The VSSP involved the upgrade of the existing 115 kV transmission system in southwestern Riverside County, including substation, distribution, and telecommunication improvements (see Figure 1). The California Public Utilities Commission (CPUC), as the project Lead Agency under the California Environmental Quality Act (CEQA), conducted the environmental review process and granted final approval of the Project. The CPUC voted on December 1, 2016 to approve SCE's Valley South Subtransmission Project (Decision 16-12-001) and a Notice of Determination was submitted to the State Clearinghouse (SCH# 2015051012). The EIR was prepared by Aspen Environmental Group under contract to the CPUC in accordance with CEQA to inform the public and to meet the needs of local, State, and federal permitting agencies in considering the project proposed by SCE.

In 2019, a Mitigation Monitoring, Compliance and Reporting Program (MMCRP) was developed collectively between the CPUC/Aspen and SCE. The MMCRP provided guidelines and procedures for environmental compliance on the Project. Aspen Environmental Group implemented the MMCRP to ensure compliance with the Project mitigation measures, compliance plans, and permit conditions during all phases of construction. This Final Report summarizes the implementation of the MMCRP for the VSSP, as follows:

- **Section 1, Introduction and Project Overview**, provides a brief overview of the VSSP and project approvals granted by the CPUC and other agencies. In addition, Section 1 outlines the role and responsibility undertaken by Aspen Environmental Group as the mitigation monitoring team, including ancillary permit tracking, preparation of notices to proceed with construction, and review of any changes to the project description, mitigation implementation, and extra workspace requirements.
- **Section 2, Project Construction and Compliance**, provides an overview of construction and compliance activities for the VSSP, including preconstruction and post-construction compliance activities.

Construction of the VSSP took place from February 2019 through November 2020, and final testing and energization was conducted December 2020.

## 1.1 Overview of VSSP

The VSSP occurs within cities of Menifee, Murrieta, Temecula, and portions of unincorporated southwestern Riverside County, California. The Project spans approximately 15.4 miles from the Valley Substation in the City of Menifee to just west of SCE's Triton Substation in the City of Temecula (see Figure 1). SCE constructed and will operate and maintain the VSSP. The Project includes the following major components:

- Modification of SCE's existing Valley 500/115 kV Substation would include equipping an existing 115 kV line position and providing protection equipment as required.
- Construction of a new 115 kV subtransmission line originating at SCE's existing Valley 500/115 kV Substation and terminating at a Tubular Steel Pole (TSP) located at the southeast corner of Leon Road and Benton Road. The TSP is the common point of the three-terminal existing Valley-Auld-Triton 115 kV Subtransmission Line. The new construction and associated reconfiguration would result in the formation of the Valley-Auld No. 2 and Valley-Triton 115 kV Subtransmission Lines. The new 115 kV subtransmission line would be approximately 12 miles in length and is referred to as Segment 1 of the Proposed Project. The majority of the new line would be within existing rights-of-way (ROW), SCE fee-owned ROW (at Valley Substation), and franchise ROW (i.e., roads, streets, sidewalks).

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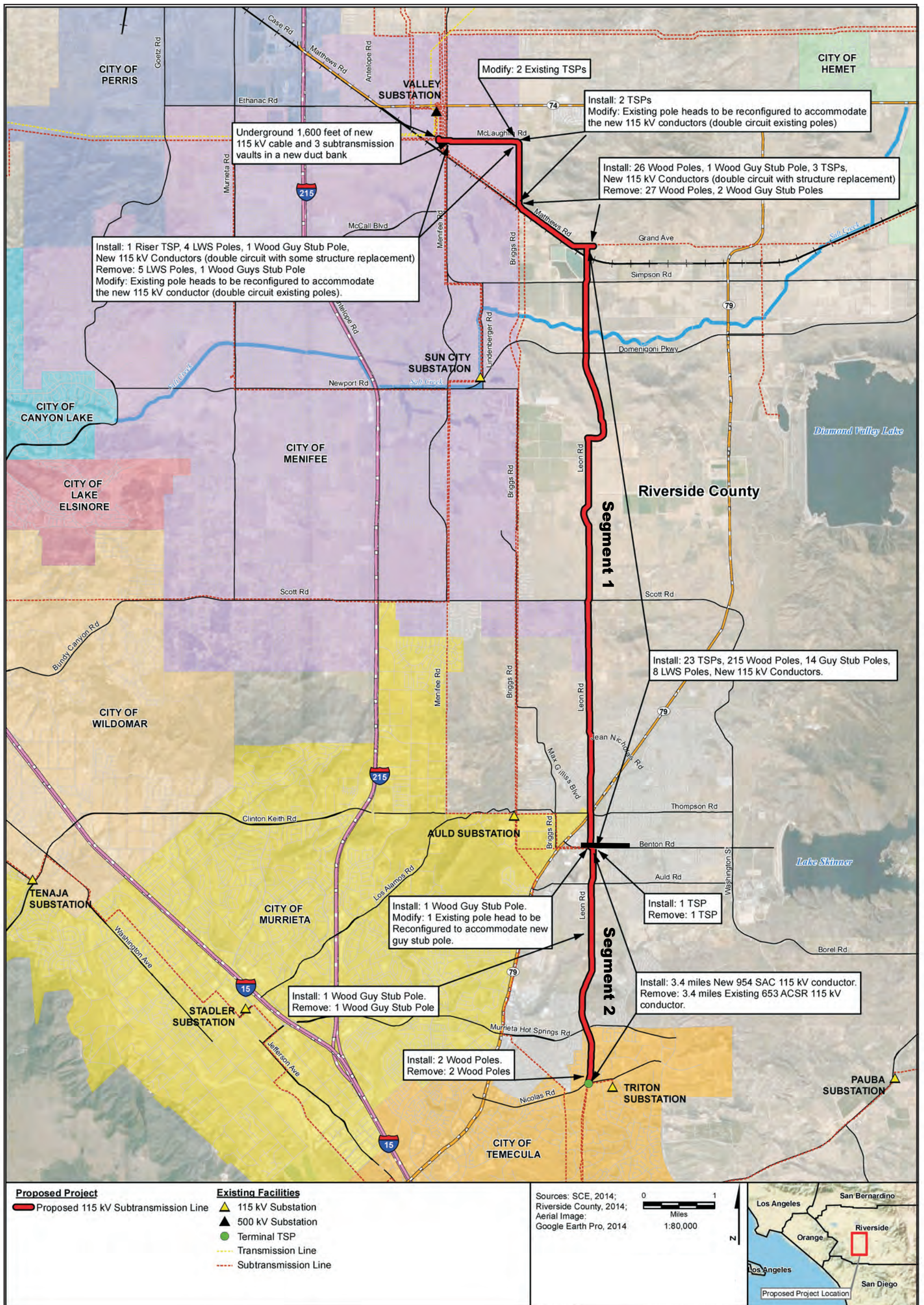


Figure 1

Subtransmission Line Route

Source: SCE, 2014.



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- Replacement of a segment of overhead conductor of the existing Valley-Auld-Triton 115 kV Subtransmission Line beginning at the TSP located at the southeast corner of Benton Road and Leon Road continuing south to the Terminal TSP located on the south side of Nicolas Road, approximately 250 feet west of Los Chorus Ranch Road in the City of Temecula. This reconductor segment is approximately 3.4 miles in length and is referred to as Segment 2 of the Proposed Project.
- Relocation of existing distribution and telecommunication lines from old poles to new poles to support installation of Segments 1 and 2 of the new 115 kV subtransmission line.
- Installation of telecommunication equipment at Triton and Valley Substations to connect the Proposed Project to SCE's existing telecommunication system.

## 1.2 Role of Aspen Monitoring Team

The Aspen Monitoring Team was composed of the Monitoring Manager (Vida Strong), EIR/EIS Project Manager (Sandra Alarcón-Lopez), Lead Environmental Monitor (Jenny Slaughter), and Environmental Monitors (Rosina Goodman and Jamie Miner).

Aspen's Monitoring Manager, Vida Strong, supervised Aspen's Environmental Monitors, determined the appropriate Monitor staffing based on construction activities, was responsible for the review and approval of preconstruction compliance materials, review and preparation of Notices to Proceed (NTPs) and Minor Project Revisions (MPRs) for CPUC consideration, Monitoring Report preparation, and CPUC website updates. The Monitoring Manager also served as the main point of contact with the CPUC Project Manager (CPUC PM) for major compliance and safety matters.

Aspen's CPUC Environmental Monitor team conducted spot-check during construction, the frequency determined by the level of activity. Prior to and during construction, the Lead Environmental Monitor (Jenny Slaughter) assisted the Aspen Monitoring Manager with the review and approval of preconstruction compliance materials, and review, field validations, and preparation of approval letters for NTP and MPR requests. The CPUC EMs stayed apprised of construction activities and schedule changes and monitored construction activities for compliance with approved project mitigation measures, Applicant-proposed measures (APMs), compliance plans, and permit conditions. The CPUC EMs documented compliance through monitoring logs and provided input for the Monitoring Reports. The CPUC EMs noted any issues or problems with implementation of mitigation/APM/permit conditions/plan implementation, notified the appropriate designated project members, and reported problems to the Aspen Monitoring Manager. As issues were identified, they were brought to the attention of the SCE field representatives to address appropriately.

The Monitoring Team participated in bi-weekly conference calls with SCE to discuss project construction, compliance, and changes.

## 1.3 Additional Permitting Activities

Numerous federal, State, and local permits and approvals were required for the Project as summarized in Table 1. Aspen tracked the necessary permitting requirements to ensure that all the applicable agency permits and approvals had been issued prior to construction. Implementation of these permit/approval requirements is described further in Sections 2.1 and 2.3.



**Table 1. VSSP Summary of Permit Requirements**

<b>Permits</b>	<b>Agency</b>	<b>Purpose</b>
<b>Federal</b>		
Notice of Proposed Construction or Alteration	FAA	Evaluates Project impacts to air navigation
7460(1) Permit and Notice to Airmen	FAA	Notification of new tall structures or use of tall construction equipment in the vicinity of an airport
<b>State</b>		
Permit to Construct	CPUC	Overall Project decision and CEQA review
Encroachment Permit	California Department of Transportation	Construction activities within, under, or over a State highway
Construction General Permit	California SWRCB	Required for projects with 1 acre or greater_of ground disturbance
<b>Regional and Local</b>		
Special Participating Entry	Western Riverside County Stephens' Kangaroo Rat Habitat Conservation Plan / WRCMSHCP	Take authorization for listed threatened or endangered species
Flood Control / Drainage / Channel Crossing Permit	Riverside County, City of Temecula	Construction activities within, under, or over flood control or drainage channels
Tree Removal / Trimming Permit	Riverside County, City of Temecula	Tree removal/trimming activities to meet line clearance requirements
Encroachment Permit	Riverside County, City of Menifee, City of Murrieta, City of Temecula	Construction activities within, under, or over a City or County road
Temporary Street / Lane Closure Permit	Riverside County, City of Menifee, City of Murrieta, City of Temecula	Construction activities resulting in street or lane closures
Grading / Excavation Permit	City of Menifee – excavation permit for vaults and trench	May be needed for access road work or for preparation of laydown areas
<b>Other Utilities</b>		
Easement / Agreement / Coordination	Railroad	Construction activities near, under, or over railroad infrastructure
Easement / Agreement / Coordination	Gas / Water / Telecommunication	Construction activities in the vicinity of other utilities

Source: SCE, 2019 MMCRP.

## 1.4 Notices to Proceed (NTPs)

VSSP included multiple components (material yards, substation, distribution, telecommunication, and transmission). Table 2 summarizes the NTPs requested by SCE and issued by CPUC for these various components of the Project. Multiple NTPs is a typical process for large-scale projects with multiple components. Since the Project had received State lead agency approval, this phased construction review process allowed SCE to proceed with individual project components where compliance with all applicable mitigation measures and conditions could be documented. A description of the preconstruction compliance activities associated with the NTPs is presented in Section 2.1.

**Table 2. VSSP NTPs**

<b>NTP No.</b>	<b>Date Requested</b>	<b>Date Issued</b>	<b>Description</b>
1	12/11/18	01/04/19	Use of 2 Material Yards and Vegetation Management at six locations along the right-of-way.
2	02/26/19	03/25/19	Construction of Project components not subject to final engineering due to use of required insulated conductor in high fire hazard areas, Segments 1 and 2.
3	05/16/19	06/07/19	Poles subject to final engineering due to required use of insulated conductor in high fire hazard areas.

In general, the NTP requests included the following:

- A description of the work.
- Detailed description of the location, including maps, photos, and/or other supporting documents.
- Verification that all mitigation measures, permit conditions or requirements, APMs, project parameters, or other project stipulations had been met, applied, or did not apply to the work covered by the NTP request.
- In a case where some outstanding requirements could not be met prior to issuance of the NTP, an outline of outstanding submittals and how they would be met prior to construction.
- Up-to-date resources surveys or a commitment to conduct surveys and submit results prior to construction.
- Cultural resource surveys or verification that no cultural resources would be significantly impacted.
- Copies of permits issued by other agencies, including requirements.
- Date of when construction was anticipated to begin and duration of work.

Aspen reviewed the NTP requests and the applicable pre-construction requirements to ensure that all the information required to process and approve the NTP was included (see Section 2.1). If additional information or clarification was needed, it was requested from SCE. Aspen prepared the recommended NTPs for CPUC review and issuance.

## **1.5 Minor Project Changes (MPCs)**

VSSP, like other large-scale projects with multiple components, resulted in the need for changes due to final project design and engineering, and the need for additional workspace or needs during construction. This is common for construction efforts of the scale of the Project and the MMCRP notes that a Minor Project Change (MPC) request would be required for these activities. As project changes were identified, SCE submitted MPC requests to Aspen/CPUC for review and approval. Aspen reviewed and field validated each request. The review included an assessment of whether the proposed activity would result in new impacts or increase in impact severity, and if the requested activity would clearly and strictly comply with the intent of the mitigation measure(s) or applicable laws or policy. MPCs were also reviewed for consistency with CEQA requirements and it was confirmed that the requested activity was located within the geographic boundary of the project study area. Finally, the review included an assessment if the requested activity would trigger other permit requirements, and if so, if the appropriate agency has approved the change. Aspen prepared letters of recommendation for CPUC consideration that documented the thorough evaluation of all activities covered under each MPR. Table 3 includes the requested SCE MPCs for the VSSP that were approved by CPUC.

**Table 3. VSSP Approved MPCs**

<b>MPC No.</b>	<b>Description</b>	<b>Status</b>
1	Leon Road Realignment	Issued by CPUC 01/11/19
2	Laydown area for wood pole storage south of Valley Substation Yard	Issued by CPUC 07/10/19
3	Additional work areas and access roads on Segments 1 and 2	Issued by CPUC 08/30/19
4	Additional work area on Segment 2	Issued by CPUC 10/29/19
5	Additional work areas and access roads on Segment 1	Issued by CPUC 12/12/19
6	Additional overland travel access on Segment 1	Issued by CPUC 01/16/20
7	Change overhead distribution work to underground and associated workspace on Segment 1 between Construction Areas UNK44 and UNK45	Issued by CPUC 03/13/20
8	Additional work area to be used for the installation of an anchor on existing pole #4393118E	Issued by CPUC 03/26/20

## 1.6 Temporary Extra Workspace (TEWS) Requests

A Temporary Extra Workspace (TEWS) is defined as a preexisting workspace (i.e., no site preparation is required) that was used by SCE and their contractors during construction for a period of up to 60 days, and that was not specifically identified and evaluated during the CEQA process. Any workspace needed for a period longer than 60 days required an MPC approval (see Section 1.5).

In order for a workspace to qualify for a TEWS, SCE had to demonstrate that:

- The TEWS was located in a disturbed (void of native vegetation) area with no sensitive resources or land uses onsite or adjacent to the proposed workspace such that they may be significantly impacted by the work,
- No ground-disturbing activities or site improvements would occur,
- SCE had permission of the applicable landowner (e.g., municipality or private) to use the work space, and
- Use of the TEWS would not result in any significant environmental impacts.

Only one TEWS was submitted for VSSP in September 2019 for use of an existing access road at Construction Area UNK241 through UNK243. The CPUC EM reviewed and field validated the TEWS request, including applicable resource information, in accordance with the above criteria. Since the TEWS request met the criteria, the CPUC EM granted approval and tracked the 60-day approval time frame.

## 1.7 Compliance Monitoring

Compliance monitoring by the CPUC EMs was intended to chronicle and document SCE's compliance with project mitigation measures, applicant-proposed measures, compliance plans, and agency permit conditions. Compliance monitoring was implemented to minimize or eliminate potential significant impacts and to protect environmental resources. As defined by the MMCRP, Non-Compliance is defined as "any deviation from applicable mitigation measures, applicant-proposed measures and project parameters, permit conditions or requirements, and approved plans." As the CPUC EMs identified deviations or inadequacies with respect to construction compliance activities, verbal warnings were provided to SCE/contractor field representatives, as well as corrective actions. If adequate compliance corrections were not made, a Project Memorandum was an initial written warning of a non-compliance activity. A Non-Compliance Report



documented chronic non-compliance activity or a blatant disregard for project mitigation measures, compliance plans, or permit conditions is demonstrated. The compliance record for the WOD Upgrade Project is discussed in Section 2.3.

## 1.8 Coordination and Communications

In field communications were conducted by the CPUC EMs with SCE/contractor field representatives in accordance with the MMCRP. Verbal warnings and written communications (emails and photographs) were utilized to notify SCE and its contractors of non-compliance activities. Field observations were logged by the CPUC EMs for every site visit. Monitoring Reports were prepared by the CPUC Monitoring Team and submitted to the CPUC, resource agencies, and SCE documenting compliance and construction progress.

The CPUC Project web site was regularly updated to reflect ongoing Project construction activities (<https://www.cpuc.ca.gov/environment/info/aspen/valleysouth/ValleySouth.htm>). The MMCRP, NTP, MPRs, and Monitoring Reports were made available via the web site.

SCE also provided bi-weekly reports documenting construction and compliance activities. As noted in Section 1.2, calls were held between the monitoring team and SCE to discuss project construction, compliance, and changes.

## 2. Construction & Compliance

As presented in Section 1, the intent of the monitoring program was to ensure compliance with the Mitigation Measures (MM) and Applicant Proposed Measures (APMs) that were included in the EIR to reduce impacts to less than significant. In addition, the development of many compliance plans was required, as well as resource and local agency permitting, as described in Section 1.3. These MMs, APMs, permit conditions, and compliance plans had pre-construction, during construction, and post-construction requirements. This section presents these various phases of compliance, as well as construction activities as follows:

- Section 2.1. Pre-construction compliance activities,
- Section 2.2. Construction activities,
- Section 2.3. During construction compliance activities, and
- Section 2.4. Post-construction compliance activities.

### 2.1 Preconstruction Compliance

Preconstruction compliance activities included verification of required permits (see Section 1.3), review and approval of required compliance plans, preparation of additional studies (geotechnical, cathodic, etc.), and implementation of required surveys, public notifications, and other field efforts. This section describes these preconstruction compliance activities. As SCE requested authorization to begin construction, Aspen ensured that the preconstruction compliance requirements by Project NTP had been satisfied.

#### 2.1.1 Compliance Plans

Prior to construction, the following compliance plans were submitted to satisfy federal, State and local agency mitigation and permit requirements. As required by Project mitigation measures, these compliance plans were reviewed by Aspen on behalf of CPUC prior to the start of construction to ensure that appropriate environmental protection would take place. If required by mitigation, upon CPUC approval, the approved plans were distributed to applicable jurisdictions. These plans were also periodically updated

in response to changing Project needs. Compliance with the plans during construction was monitored by CPUC EMs, including post-construction restoration.

- Cultural Resource Management Plan (MM CR-2)
- Fugitive Dust Control Plan (MM AQ-1)
- Geotechnical Study (MMs GEO-1, GEO-2)
- Habitat Mitigation and Monitoring Plan (MM BIO-17) for permanent impacts to vegetation communities, listed or special-status plants and wildlife
- Habitat Restoration and Monitoring Plan (MM BIO-4) for restoration of temporarily disturbed areas
- Night Lighting Management Plan (MM AES-5)
- Nesting Bird Management Plan (APM BIO-3, MM BIO-7)
- Paleontological Resources Management Plan (APM CUL-1, MM CR-9).
- Surface Treatment Plan (MM AES-6)
- Worker Environmental Awareness Program (MM BIO-1)

### 2.1.2 Field Efforts

Prior to the start of construction at any given location, SCE and their construction contractors were required to follow established construction practices, including the following. Many of these practices were also included as mitigation and/or permit requirements.

- **Identification of Underground Utilities.** SCE or their contractor, contacted Underground Service Alert to identify any underground utilities in the construction zones. If an underground utility were identified as being potentially affected by SCE's construction or operation procedures, SCE/contractor worked with the affected underground utility owner/operator to develop a method to mitigate conflicts.
- **Work Site Staking/Flagging (MMs BIO-2, BIO-5, BIO-8, BIO-9, BIO-13, BIO-15, BIO-18).** Prior to any construction, or equipment or crew mobilization at each work site, resource and work areas were marked with staking or flagging to identify the limits of work and biological resources. As required by the noted mitigation, avoidance buffers were established to minimize biological resource impacts. SCE provided CPUC final engineering GIS shapefiles depicting all temporary and permanent disturbance areas, as well as summary data on temporary and permanent disturbance for each vegetation or habitat type within each jurisdictional area. This staking/flagging was field validated by the CPUC Environmental Monitor (EM).
- **SWPPP BMPs.** Installation of storm water best management practices (BMPs) at worksites as required by the Project Storm Water Pollution Prevention Plan (SWPPP).
- **Worker Environmental Awareness Program (WEAP) (MMs BIO-1, BIO-10, CR-3, CR-10).** A WEAP was prepared to educate on-site workers about the proposed Project's sensitive environmental issues. Throughout the duration of construction, SCE/contractor was responsible for ensuring that all on-site project personnel receive the WEAP training prior to beginning work. SCE/contractor maintained a list of all personnel who completed the WEAP training. This list was made available to the CPUC EM upon request. To help construction crews and other personnel maintain awareness of environmental sensitivities and requirements, periodic, brief WEAP refresher presentations were held at morning tailboards.

### 2.1.3 Other Studies, Surveys & Notifications

Additional issue area specific preconstruction requirements are described below.

## Aesthetics

- **Screen Construction Activities from View (MM AES-1).** As required by MM AES-1, construction yards, staging areas, and material and equipment storage areas, including storage sites for excavated materials, shall be visually screened using temporary screening fencing; however, for those areas where SCE could demonstrate that construction yards and facilities were located away from areas of high public visibility including public roads, residential areas, and public recreational facilities, screening was not required. For the Valley Substation material yard approved under NTP 1, SCE provided a detailed map demonstrating that it wasn't visible from nearby roads, residences, or recreational facilities, so screening wasn't required. This exception was extended to the wood pole storage area near the Valley Substation approved under MPC #2.

## Biological Resources

- **Biologist Qualifications/Resume Review (MM B-3, B-5, B-6, B-8, B-9, B-10, B-12, B-15, B-18, B-20, B-21, B-22, B-23, and B-25).** SCE submitted the resumes for the lead biologists, biological species specialists, and biological monitors, including but not limited to bat, nesting bird, and special-status species monitors, to CPUC/Aspen for review and approval prior to the commencement of construction related surveys and monitoring. The intent of the resume review was to ensure to the satisfaction of the CPUC that the biological field staff had the appropriate education and experience to accomplish the assigned biological resources tasks.
- **Biological Preconstruction Surveys.** General preconstruction surveys were conducted in accordance with APM BIO-1. Preconstruction surveys for special-status plants and wildlife were conducted for the following: Nesting birds (APM BIO-2, MM BIO-7), Stephen's kangaroo rat (APM BIO-5, MM BIO-15), special-status plants (APM BIO-6, MM BIO-18), special-status wildlife (APM BIO-6), western spadefoot toad (MM BIO-20), two-striped garter snake (MM BIO-21), terrestrial herpetofauna (MM BIO-22), and sensitive bats (MM BIO-23), and environmentally sensitive area (ESA) flagging was installed. The CPUC EMs field validated the preconstruction survey results, including required ESA flagging.
- **Protocol & Focused Surveys.** Protocol surveys for listed riparian bird (MM BIO-8) were conducted in 2019 and coastal California gnatcatcher protocol surveys (MM BIO-9) were conducted in 2019 and 2020. In March 2019, USFWS waived protocol survey requirements for quino checkerspot butterfly (BIO-10) and vernal pool/Riverside fairy shrimp (MM BIO-12) given SCE's coverage under the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) as a Participating Special Entity.
- **Compensate for Permanent Habitat Loss.** Compensation for permanent habitat loss was required for the following: sensitive vegetation communities (MM BIO-3), quino checkerspot butterfly (MM BIO-11), vernal pool/Riverside fairy shrimp (MM BIO-14), Stephen's kangaroo rate (MM BIO-16), and State and federally listed/special status plants (MMs BIO-19, BIO-24). SCE compensated for permanent or long-term habitat loss through participation in the Western Riverside County Regional Conservation Authority MSHCP. The Certificate of Inclusion which confirms that the SCE VSSP was consistent with the Western Riverside County Regional Conservation Authority MSHCP was executed in October 2018.
- **Preparation of a Habitat Mitigation and Monitoring Plan (MM BIO-17).** MM BIO-17 required SCE to compensate for permanent impacts to vegetation communities and listed or special-status plants and wildlife. Instead of preparing a Habitat Mitigation and Monitoring Plan, SCE has received a Certificate of Inclusion from the RCA to authorize "take" for MSHCP protected species and SCE has become a Participating Special Entity (PSE) within the MSHCP Plan Area. SCE provided documentation of compliance with the MSHCP to the CPUC.
- **Avian Safe Design (APM BIO-4).** The 115 kV subtransmission structures was designed to be consistent with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).



### Cultural/Paleontological Resources

- **Avoid Environmentally Sensitive Areas (MM CR-1).** Where operationally feasible, all CRHR-eligible and historic resources were protected from direct project impacts by project redesign (i.e., relocation of the line, ancillary facilities, or temporary facilities or work areas).
- **Resume Review (MMs CR-4, CR-9).** SCE submitted the resumes for the principal archaeologist, project paleontologist, and cultural and paleontological resource monitors, to CPUC for review and approval prior to the commencement of construction related surveys and monitoring. The intent of the resume review was to ensure to the satisfaction of the CPUC, that the cultural and paleontological resource field staff had the appropriate education and experience to accomplish the assigned resource tasks.

### Hazards and Hazardous Materials

- **Pesticide/Herbicide Contamination (MM HAZ-1).** SCE provided documentation that a soil analysis for VSSP was conducted which revealed no areas of elevated contaminate concentration in the soil due to historical agricultural use.

### Hydrology and Water Quality

- **Use Non-potable Water (MM HYD-1):** In July 2018, SCE provided documentation that the contractor would be utilizing a non-potable water line located on the east side of Leon Road for dust control, soil compaction activities, and site restoration/revegetation.
- **Jurisdictional Waters (MSHCP).** Jurisdictional waters (which were also characterized as MSHCP riparian/riverine resources) were identified at 45 locations in Segment 1 and at 18 locations on Segment 2. According to SCE, the Project was designed to avoid jurisdictional waters/wetlands and MSHCP riparian/riverine resources. Direct and indirect impacts to these features was avoided by perimeter marking, careful siting of work areas, and appropriate water use and soil movement measures. Vehicles and equipment followed the Best Management Practices discussed in MM BIO-2 to avoid potential disturbance to jurisdictional water features and MSHCP riparian/riverine resources.

### Land Use & Planning

- **Coordination with Project Developers near or in the proposed Project Alignment (MM LU-3).** SCE coordinated with project developers who had approved projects adjacent to the VSSP alignment to minimize cumulative construction impacts. Coordination documentation was provided to CPUC.

### Recreation

- **Identify and Provide Noticing of Affected Recreation Areas (MM REC-1).** MM REC-1 required SCE to coordinate with applicable local or regional agencies and/or an agency representative(s) for all recreational areas affected by Project construction. No recreational areas are affected (closed or limited in use) by Project construction activities on Segment 1 or Segment 2.

### Transportation and Traffic

- **Traffic Control Plans (APM TRA-1, MM TRA-1).** SCE provided local jurisdiction approval of the Traffic Control Plans for construction to the CPUC as site specific traffic control plans and permits were approved.
- **Comply with FAA 7460-1 Determination Recommendations (MM TRA-2).** In May 2019, SCE provided FAA concurrence that the Project aeronautical studies revealed that no structures exceed obstruction standards and would not be a hazard to air navigation provided that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after structure construction reaches its greatest height (7460-2, Part 2).

- **Repair Roadways and Transportation Facilities Damaged by Construction Activities Roadway Use/Damage (MM TRA-3).** In August 2018, SCE’s contractor took video documentation of the transportation facility conditions near Project heavy vehicle ingress/egress points from public roadways and provided the documentation to the applicable local agencies and Caltrans, with notification to CPUC.

## 2.2 Construction

Construction activities are described in this section by NTP.

### 2.2.1 NTP #1, Material Yards & Vegetation Management

Under NTP #1, the follow VSSP activities were authorized by CPUC to start:

- **Valley Substation Contractor Yard.** The Valley Substation Contractor Yard consists of approximately 3.1 acres in the City of Menifee, Riverside County, California, located inside the existing SCE Valley Substation located on Menifee Road, south of Highway 74 and north of Case Road. The Contractor Yard was located within a designated area within the rocked, graveled and fenced Substation; therefore, no site preparation was required. As authorized under the CPUC Project approval, one fuel storage tank was installed within the Yard.
- **Antelope Contractor Yard.** The Antelope Road Contractor Yard consists of approximately 9.5 acres in the City of Menifee, Riverside County, California, located south of Ethanac Road, between Dawson Road to the west, and Antelope Road to the east. The site preparation for the Antelope Contractor Yard required the clearing and removal of weeds and brush, as well as the extension of electrical power and communication services to the future onsite office trailer from the nearby distribution source. New fence installation and repairs were also authorized. Throughout the duration of construction, the Antelope Contractor Yard was never established for use.
- **Vegetation Management.** Under NTP #1, initial vegetation clearance activities for the Project was authorized for six separate locations where vegetation was trimmed and removed as necessary to allow for future construction, operation, and maintenance of the Valley South Subtransmission Project.

### Construction Summary

Construction activities associated with NTP #1 began on February 4, 2019 with preparation of the Valley Substation Contractor Yard. Electrical power and communication services were extended to the new onsite office trailer from a nearby distribution source. New fencing was installed for security purposes within the substation and fencing repairs were made as necessary. No fence screening was installed for safety reasons, plus the Yard was not visible from the street or near any sensitive receptors, so screening was not required (MM AES-1). Shaker plates for track-out control were delivered and installed along the driveway to Valley Substation (see Figure 2). A gate was also installed for the substation fence to accommodate ingress and egress. During construction, Wilson Construction and their subcontractors, Cattrac and KV Structures, used the Valley Substation Contractor Yard for mobile office headquarters and equipment and material storage. Activities associated with the yard included delivery of materials including rebar cages, tubular steel poles (TSPs), and conduit.



Figure 2. Shaker plate for track-out control was delivered to the Valley Substation Yard driveway.

In February 2019, vegetation removal was completed at Vegetation Management Areas 1-3 and 6. At that time, Sites 4 and 5 were put on hold pending property owner negotiations. Site 4 was cleared August 2019 and Site 5 was cleared October 2019. Fire prevention tools and equipment were onsite during vegetation clearance activities. Trees that were removed during nest season (January 1 through August 15) were inspected for active nests by the avian biologist prior to removal (MM BIO-6).

### 2.2.2 NTPs #2 and #3, Project Construction

Authorization to begin construction of the project subtransmission and associated components was requested under two separate NTP requests, #2 and #3, since during the duration of final engineering and prior to the start of construction, SCE implemented a program for the use of insulated conductor in high fire hazard areas. Since the insulated conductor is heavier, additional final engineering was required for the structures in high fire hazard areas; the Project structures requested under NTP #3. NTP #2 included Project components that didn't require this additional final engineering. The following Project components were authorized under NTP #2:

- **115 kV Subtransmission.** Installation and upgrades of the 115 kV subtransmission line included installation of new subtransmission line structures, foundations, anchors, guy wires, conductor, and hardware assemblies, and disposal of removed poles, conductor, and hardware. Subtransmission structures included a mix of light-weight steel (LWS) poles, tubular steel poles (TSPs) and wood poles (see Figure 1). Existing public roads and subtransmission line roads were utilized for construction; no new road construction required. Typical structure work areas measured between 150 to 200 feet by 75 to 100 feet, and wire set up and work areas varied from 300 feet by 100 feet for pulling and tensioning equipment, to 150 feet by 100 feet for splicing equipment.
- **12 kV and 33 kV Distribution.** Site work to accommodate the proposed 115 kV subtransmission line included modification of some existing 12 kV and 33 kV distribution facilities. Distribution work included installation of new conductor, replacement of existing conductor, relocation of underground transitions (risers), trenching, installation of conduit, and installation of underground vaults. Existing public roads and transmission line roads were used as much as possible during construction. Typical structure work areas measured between 150 to 200 feet by 75 to 100 feet.
- **Telecommunications.** Existing SCE and third-party telecommunication cables were transferred to the new 115 kV subtransmission poles with crews working from bucket trucks. These cables were attached with wood cross-arms and/or metallic suspension side clamps. No new telecommunication cable was installed. Channel equipment was installed in the existing Mechanical and Electrical Equipment Rooms (MEER) at the Valley and Triton Substations. The franchise area and existing transmission access roads were utilized during construction.
- **Substation Upgrades.** Upgrades at the Valley Substation consisted of installation of new foundations, CBs, group operated disconnect switches, potential transformers and associated grounding for new equipment, bus supports, one new underground vault and underground riser with associated conduits and surge arresters. Additionally, crews replaced three station yard lights with night sky compliant LED lights and protective relaying equipment inside of the MEER. At Auld Substation, work consisted of replacement of the protective relaying equipment inside the MEER for the Valley-Auld line. At Triton Substation, work consisted of the replacement of protective relaying equipment inside the MEER for the Valley-Triton line.

Under NTP #3 the following additional project poles were authorized by CPUC, as well as associated foundations, anchors, guy wires, conductor, and hardware assemblies, and disposal of removed poles, conductor, and hardware.



- Structures UNK 68 – UNK 95 and associated work areas
- Structures UNK 222 – UNK 228 and associated work areas

These subtransmission structures included a mix of LWS poles, TSPs, and wood poles. As with Project features approved under NTP #2, installation of poles approved under NTP #3 utilized existing public roads and subtransmission line roads for construction, and work areas were the same as identified for NTP #2.

### Construction Summary

As illustrated on Figure 1, the Project 115 kV Subtransmission line included two separate segments:

- **Segment 1** involved the removal, modification, and installation of new poles between the Valley Substation and Auld Substation. New installations included 29 TSPs, 12 LWS poles, 241 wood poles, and 16 wood guy stub poles. Removals included 5 LWS poles, 27 wood poles, and 3 wood guy stub poles. Two TSPs were modified. Between the Valley Substation and Matthews Road existing poles were modified to accommodate the new 115 kV double circuit conductor. In addition, underground installation of 115 kV cable and vaults were conducted near Valley substation and between Construction Areas UNK207 and UNK222 on Leon Road.
- **Segment 2** involved the replacement of 3.4 miles of existing 115 kV conductor (653 ACSR) with new 115 kV conductor (954 SAC) between the Auld Substation and Triton Substation. In addition, one TSP was removed and replaced with a new TSP, two wood poles were replaced, and two wood guy stub poles were installed (one old removed).

**Above Ground: 115 kV Subtransmission, 12 kV/33 kV Distribution.** Subtransmission construction activities began on May 6, 2019, with the potholing of Segment 1 utilities, hanging of grounds, and BMP installations by Wilson Construction. In addition, KV Structures started TSP foundation activities (drilling and concrete pouring) that continued through July 2019 (see Figure 3) at which time KV Structures was demobilized. In October 2019, KV Structures returned to complete seven of the eight remaining foundations, and returned in April 2020 to complete the last foundation.

In July 2019, Wilson Construction began receiving and storing wood poles using the laydown area (see Figure 4) approved under Minor Project Change #2 (see Table 3 above).

In August 2019, the staging, framing, and installation of poles began along Segment 1, as well as the mowing/trimming of vegetation and hanging of insulators. By September 2019, TSP assembly and erection, setting of LWS and wood poles (see Figure 5), reframing of insulators, moving phases, reconductoring (see Figure 6), and vegetation and tree removal/trimming were being conducted. Overnight work was conducted during September 2019 between McLaughlin and Briggs roads. In November 2019, sidewalk replacement and landscaping and fencing repair began. Wire stringing began in December 2019 and installation of distribution transformers and distribution reconductoring began in February 2020 and continued through June 2020. Three new distribution poles between Construction Areas UNK98 and UNK102 were initially placed slightly out of alignment. In September 2020, Wilson crews readjusted the pole placement to the correct alignment (Figure 7). Forty-three existing pole butts were left in place to allow Frontier Communications to move their wire to the new distribution poles. These pole butts were removed between August 2020 and October 2020 (Figure 8). Segment 1 demobilization and close-out continued through November 2020. In December 2020, site preparation and hydroseeding at Segment 1 restoration sites began.

In August 2019, mowing of pull sites for Segment 2 was conducted, as well as the lowering of pole cross-arms and installation of bird guards. In October 2019, the lowering of arms for the 12 kV and 33 kV circuits, reconductoring, and installation of stabilized entrances for right-of-way roads began. No work occurred on Segment 2 in December 2019 since scheduled outages were cancelled, but work resumed in January 2020, including site preparation and weeding for hydroseeding. Watering of Segment 2 restoration sites began in February 2020.



Figure 3. Foundation drilling at Construction Area UNK247



Figure 4. MPC #2 laydown area for wood pole storage



Figure 5. Setting wood pole at Construction Area UNK183



Figure 6. Reconducting activities from Construction Area UNK250 to UNK01



Figure 7. Pole realignment at Construction Area UNK101



Figure 8. Pole butt removal at Construction Area UNK21



**Below Ground: 115 kV Subtransmission.** In May 2019, Cattrac started the trenching for conduit of the underground section along Valley Substation west of Menifee Road (see Figure 9), and excavations for vaults started in June 2019 east of Menifee Road. By July 2019, conduit placement within the trench began (see Figure 10), followed by slurry to encase the conduit and trench backfill. By the end of July 2019, Cattrac pulled rope through the conduit on the northern underground and paved the trench across Menifee Road (see Figure 11). In early August 2019, Cattrac mobilized to the southern underground section on Leon Road, and marked and cut pavement for the underground trench and vaults. Excavation of the southern underground duct bank trench began in August 2019 and vault excavation and conduit installation began in September 2019. Excavation along Leon Road between Vaults 1B and 2B and installation of conduit in the duct bank trench between Vaults 2B and 3B were conducted in October and November 2019. Installation and encasing of conduit in the duct bank trench between Vault 1 and Vault 2B began in December 2019. Completed sections of the underground alignment were repaved in January 2020. In February 2020, Cattrac completed pulling rope and QA/QC on all the vaults, paving along Leon Road, and demobilized. SCE conducted the cable pull of the northern underground section February through July 2020, and the southern underground section cable pull was conducted in July 2020 as nighttime work in accordance with the City Encroachment Permit. The southern underground construction activities were completed in August 2020.

**Substation Upgrades.** In January 2020, SCE crews began construction activities within the Valley Substation for the installation of new components. Construction activities included hauling materials, moving rock and dirt, and working on the 115kV rack. Vault and conduit installation, and wiring in the MEER building began in February 2020. Pulling of cable from the vault at UNK250 and the vault inside the Valley Substation began in March 2020. Wiring within the MEER building and the 115 kV rack began in April 2020. Substation work was completed in July 2020.



Figure 9. Underground trenching from Valley Substation to Menifee Road



Figure 10. Placing conduit in the trench from Menifee Road to Construction Area UNK250

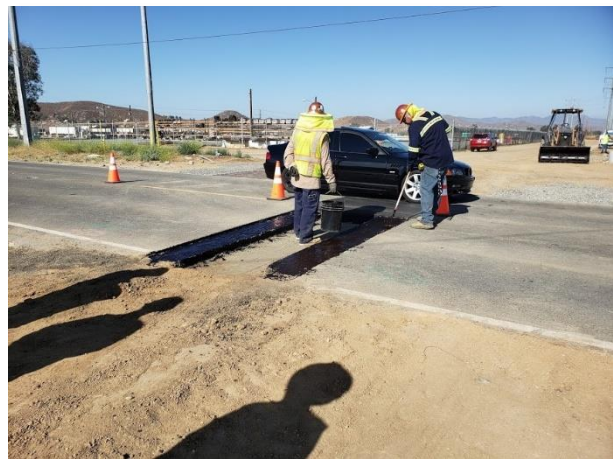


Figure 11. Paving activities on Menifee Road for the northern underground section near Valley Substation

**VSSP Testing and Energization.** Final testing and complete energization of the VSSP was delayed until December 2020 due to a required outage.

## 2.3 Compliance During Construction

### 2.3.1 During Construction Compliance Requirements

This section describes the compliance activities that were conducted as required by approved mitigation measures once authorization to start construction was granted. See Section 2.1 for a description of pre-construction compliance requirements that needed to be implemented prior to the start of construction in a given location. Since the start of construction was phased over years, these preconstruction compliance requirements were implemented throughout construction. Section 2.1.1 presents the various plans that were required to be submitted and approved prior to construction and their implementation throughout Project construction and restoration is presented below. Additional construction compliance requirements are also presented below. Implementation of construction compliance requirements was field validated by the CPUC EMs.

#### Aesthetics

- **Minimize Vegetation Removal and Ground Disturbance (MM AES-2).** Within the structure and wire pull work areas presented in Section 2.2.2, only the minimum amount of vegetation necessary for the subject construction activity was removed. In particular, vegetation within the right-of-way and ground clearing at the foot of each pole and between poles was limited to the clearing necessary to comply with all regulatory requirements. In addition, vegetation mowing and overland travel were utilized to minimum vegetation removal.
- **Reduce Color Contrast of Graveled Surfaces (MM AES-3).** If construction unavoidably introduced graveled surfaces that resulted in substantial visual contrast visible from sensitive public viewing locations, the graveled surfaces were treated with an appropriate color or material (e.g., Natina Rock, Eonite, or Permeon, or similar) to reduce the visual contrast created by placing the lighter-colored rock adjacent to darker soil and vegetated surroundings.
- **Prohibit Construction Marking of Natural Features (MM AES-4).** During construction, no paint or permanent discoloring agents were applied to rocks or vegetation to indicate survey or construction activity limits, or for any other purpose.
- **Minimize Night Lighting at Construction Sites and Project Facilities (MM AES-5).** As presented in Section 2.1.1, SCE prepared for CPUC approval a Night Lighting Management Plan that identified best management practices for the minimization of night lighting in the event night construction was required. The Night Lighting Management Plan also addressed night lighting minimization of O&M activities. Night-time construction was required for Segment 1 work between McLaughlin and Briggs roads in September 2019. The cable pull for the southern underground section was conducted at night during July 2020.
- **Treat Structure Surfaces (MM AES-6).** As proposed and incorporated in the CPUC approved Surface Treatment Plan, SCE installed subtransmission facilities and conductors that were non-specular and non-reflective, and the insulators that were non-reflective and non-refractive. Installed TSPs had a “dulled galvanized finish. As noted in Section 2.2.2, Segment 2 included the use of new non-specular conductor (954 SAC) between the Auld Substation and Triton Substation.

#### Agricultural Resources

- **Coordinate with Agricultural Landowners (MM AG-1).** During construction, SCE coordinated with potentially affected property owners of Farmland (Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland) and Agricultural Preserve lands to reduce disruption

to agricultural operations during construction and ensure that restoration of any damaged or disturbed Farmlands was implemented. Coordination also included the scheduling of construction activities to avoid peak planting, growing, and harvest seasons as feasible. SCE provided CPUC/Aspen the Communication Log to demonstrate ongoing coordination activities.

### Air Quality

- **Fugitive Dust Control (MM AQ-1a, APMs AIR-1 & AIR-2).** The Fugitive Dust Control Plan was implemented during construction. This plan included restrictions for vehicle traffic speeds on unpaved roads, use of dust suppressants (water and chemical stabilizers), graveling of yards, controlling and cleanup of trac-out, mowing of vegetation in lieu of removal, covering soil truck loads and material stockpiles, and suspension of activities or implementation of additional best management practices when wind speeds exceeded 25 mph.
- **Off-Road Equipment Emissions Control (MM AQ-2, APM AIR-3).** Off-road construction equipment with engines larger than 50 horsepower had engines that met or exceeded US Environmental Protection Agency/California Air Resources Board (CARB) Tier 3 Emissions Standards, as demonstrated by equipment logs submitted by SCE. Exceptions included (1) an off-road equipment item that is a specialty, or unique, piece of equipment that cannot be found with a Tier 3 or better engine after a due diligence search; and/or (2) an off-road equipment item that would be used for a total of no more than 5 days; and/or (3) the off-road equipment is registered under CARB's Statewide Portable Equipment Registration Program. Additionally, all off-road equipment engines were maintained in good operating condition and in tune per manufacturers' specification. Equipment idling was limited to no more than five minutes unless needed for proper operation.

### Biological Resources

- **Conduct Biological Monitoring and Reporting (APM BIO-1, MM BIO-5).** Biological monitors were on-site during construction to ensure that avoidance measures were properly implemented in areas where there was a potential for special status species to be present based on previous survey results, including coastal California gnatcatcher (APM BIO-7), listed riparian birds (APM BIO-8), quino checkerspot butterfly (APM BIO-9), and vernal pools (APM BIO-10). Clearance surveys for special-status species were conducted by the authorized biologist prior to the initiation of construction each day during initial ground disturbance, and weekly thereafter. The qualified biologist(s) were present at all times during ground-disturbing activities immediately adjacent to, or within, habitat that supports populations of listed or special-status species. Once initial ground disturbance was complete, monitoring occurred periodically during subsequent construction activities. Any special-status terrestrial species found within a VSSP impact area were relocated by the authorized biologist to suitable habitat outside the impact area, in accordance with applicable permits and/or MOU's. Special status species observations, avoidance measures, and mortalities were reported to the appropriate wildlife agencies. In addition, species events were provided in daily, bi-weekly, and monthly reporting to CPUC/Aspen that summarized all special status species observations. Special-status species observations during construction included the following:
  - **Special-Status Plant Species:** Two special-status plant species were observed and documented by Project biologists along Segment 1: paniculate tarplant (*Deinandra paniculata*) and smooth tarplant (*Centromadia pungens* ssp. *laevis*). Six special-status plant species were observed and documented by Project biologists along Segment 2: long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), Palmer's grapplinghook (*Harpagonella palmeri*), paniculate tarplant, San Diego ambrosia (*Ambrosia pumila*), small-flowered microseris (*Microseris douglasii* ssp. *platycarpha*), and small-flowered morning-glory (*Convolvulus simulans*). On Segment 1, over 1,250 square feet of smooth tarplant occupied habitat and an unknown number of seedlings were impacted across five locations. Paniculate tarplant impacts on Segment 1 included the removal of approximately 40,200 individuals



across 12 locations and the removal of 2,350 square feet of occupied habitat and an unknown number of seedlings across four locations. On Segment 2, 540 square feet of Palmer's grapplinghook occupied habitat was temporarily impacted by drive and crush activities within the work area, and 470 individual Paniculate tarplant were removed across 15 locations.

- **Special-Status Wildlife Species:** Sixteen special status wildlife species were observed and documented by Project biologists along Segment 1: American peregrine falcon (*Falco peregrinus anatum*), American white pelican (*Pelecanus erythrorhynchos*), coastal California gnatcatcher (*Poliophtila californica californica*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), loggerhead shrike (*Lanius ludovicianus*), prairie falcon (*Falco mexicanus*), red-diamond rattlesnake (*Crotalus ruber*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Swainson's hawk (*Buteo swainsoni*), western red bat (*Lasiurus blassevillii*), western spadefoot (*Spea hammondi*), white-tailed kite (*Elanus leucurus*), white-faced ibis (*Plegadis chihi*), and Yuma myotis (*Myotis yumanensis*). Additionally, one Stephens' kangaroo rat (*Dipodomys stephensi*) non-project related mortality was identified. Four special status wildlife species were observed and documented by Project biologists along Segment 2: coastal California gnatcatcher, orange-throated whiptail (*Aspidoscelis hyperythra*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and San Diego tiger whiptail (*Aspidoscelis tigris stejnegeri*). No project-related impacts to special-status wildlife species occurred.
- **Special-Status Species Habitat:** Potential habitat for three special-status wildlife species was observed and documented by Project biologists on Segment 1: fairy shrimp (*Branchinecta* sp.), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), and Stephens' kangaroo rat. Potential habitat for three special-status wildlife species was observed and documented by Project biologists along Segment 2: fairy shrimp, San Diego desert woodrat (*Neotoma lepida intermedia*), and Stephens' kangaroo rat. Six potential Stephens' kangaroo rat burrows were impacted during construction.
- **Implement Best Management Practices (BMPs) (MM BIO-2).** BMPs were implemented during all ground disturbance and construction related activities to avoid or minimize impacts on biological resources, including but not limited to: Parking of vehicles on previously disturbed/paved areas or areas temporarily disturbed as part of the Project, restricting vehicle speed limits to 15 mph on unpaved roads, covering and inspection of excavations and pipes, no grading or construction activities before dawn or after dusk, proper use and storage of chemicals, no domestic animals or firearms on site, and restricting Project vehicles to established, paved roads outside of construction areas. Compliance with BMPs was documented and provided in the annual report. The reports included a summary of the construction activities completed, a review of the sensitive plants and wildlife encountered, a list of compliance actions and any remedial actions taken to correct the actions, and the status of ongoing mitigation efforts.
- **Implement a Nesting Bird Management Plan (NBMP) (MM BIO-7, APM BIO-3).** In accordance with the NBMP, on-site monitoring was conducted during construction to ensure avoidance measures, buffer areas, and noise monitoring were properly implemented. Buffer adjustments for special-status species were reviewed and recommended by a qualified avian biologist, in consultation with the CDFW and/or USFWS. For non-sensitive species, the qualified avian biologist assessed and implemented buffer reductions in the field and provided notification of the reductions to the CPUC, CDFW, and USFWS. No nest removals or installation of nest deterrents were required on VSSP, with the exception of covering pipe ends. Throughout construction, project activities in the vicinity of nests (including helicopter traces), and any adjustments to buffer areas were updated and made available to CPUC monitors on a daily basis.

During Segment 1 construction, a total of 43 active nests were observed and documented by Project biologists. Species observed with active nests include American kestrel, common raven, Eurasian collared-dove, hooded oriole, house, northern mockingbird, red-tailed hawk, red-winged blackbird, Say's phoebe,

western meadowlark, western kingbird, and loggerhead shrike (CDFW species of special concern). A total of 13 active nests were observed and documented by Project biologists during Segment 2 construction. Species observed with active nests include Anna's hummingbird, bushtit, California quail, coastal California gnatcatcher, killdeer, mourning dove, northern mockingbird, and western kingbird. No impacts occurred to active nests on the Project.

At the end of each year's nest season, SCE submit annual NBMP reports to the CPUC, CDFW, and USFWS. The annual reports described all preconstruction survey work, monitoring data (including names of monitors, activities and sites visited throughout the season), all reductions from standard buffer distances, buffer incursions and nest disturbance, project-related take of nesting birds, and nest outcomes for all nests documented throughout the year. Calls were held to discuss the contents of the annual reports and any recommended adaptive strategies.

- **Conduct Protocol Surveys for Least Bell's Vireo, Southwestern Willow Flycatcher, and Willow Flycatcher; Avoid Occupied Habitat (MM BIO-8).** Protocol surveys in 2019 were conducted for riparian birds at 12 suitable riparian habitat patches throughout Segments 1 and 2. Least Bell's vireo (*Vireo bellii pusillus*) were observed at three locations on Segments 1 and 2; however, no nests or nesting behavior was observed during the surveys. No riparian bird surveys occurred in 2020 since construction near suitable habitat had been completed.
- **Conduct Protocol Surveys for Coastal California Gnatcatcher (CAGN) and Avoid Occupied Habitat (MM BIO-9).** Protocol surveys in 2019 and 2020 were conducted for coastal California gnatcatcher (CAGN) which were observed in two separate areas in Segment 1, and throughout Segment 2. A total of two CAGN nests were documented on Segment 2.
- **Complete Focused Pre-construction Western Spadefoot Toad Surveys and Implement Avoidance Measures (MM BIO-20).** Annually, for the duration of construction activities and based on appropriate rainfall and temperatures (generally between the months of February and April) a series of pre-construction surveys in all appropriate vegetation communities within the Project footprint were conducted. Surveys included evaluation of all previously documented occupied areas and a reconnaissance level survey of the remaining natural areas of the site. All pre-construction surveys were negative for Western spadefoot toad.

## Cultural Resources

- **Implement Cultural Resource Management Plan (CRMP) (MM CR-1, MM CR-2, MM CR-4, MM CR-6).** Wherever a pole, access road, equipment, etc., was placed or accessed within 100 feet of a recorded, reported, or known cultural resources eligible or potentially eligible for the CRHR, as defined by the CRMP, the site was flagged on the ground as an ESA (without disclosure of the exact nature of the environmental sensitivity [i.e., the ESA is not identified as containing a sensitive cultural resource]) and archaeological and Tribal monitoring were conducted (MM CR-4); archaeological and Tribal monitoring of Project construction focused in the immediate vicinity of the designated ESAs. Construction equipment was directed away from the ESA and construction personnel were directed not to enter the ESA. As specified in the CRMP, intermittent monitoring occurred in areas of moderate archaeological sensitivity at the discretion of the principal archaeologist. When unknown cultural resources were discovered during construction, the procedures defined in the CRMP for unanticipated cultural resource discoveries were implemented, including necessary consultations, assessment of CRHR eligibility, determining if avoidance was feasible, formulating a mitigation plan if required, and implementing treatment (MM CR-6). During construction, the following cultural discoveries associated with established cultural ESAs were recorded: one new cultural feature (R191001-09-01) and one prehistoric artifact (R190812-33-01). Monitoring reports were submitted to the CPUC cultural resources expert on a weekly basis.

- **Properly Treat Human Remains (MM CR-7).** In the event human remains were discovered during construction, all work was to be diverted from the area of the discovery and the CPUC informed immediately. The remains were to be treated in accordance with Health and Safety Code Section 7050.5, CEQA Section 15064.5(e), and Public Resources Code Section 5097.98. SCE was to assist and support the CPUC, as appropriate, in all required consultations with Native Americans, agencies and commissions, and consulting parties as requested by the CPUC. No human remains were discovered during construction.
- **Monitor Construction for Paleontological Resources (MM CR-11, APM CUL-1).** Based on the Paleontological Resources Inventory and Paleontological Resource Mitigation and Monitoring Plan (MM CR-9), a qualified paleontological monitor conducted full-time construction monitoring in areas determined to have high paleontological sensitivity. For sediments with undetermined sensitivity, those areas were monitored on a part-time basis (as determined by the Qualified Paleontologist). Monitoring consisted of the visual inspection of augering activities and spoils piles at the locations of the boreholes, as well as any trench sidewalls and excavated or graded areas for roadways, tower pads, and other ancillary structures. No significant paleontological resources were identified during construction. Generally, monitoring reports were submitted to the CPUC on a weekly basis.

#### Hazards and Hazardous Materials

- **Pesticide/Herbicide Contamination (MM HAZ-1).** Implementation of MM HAZ-1, which required special handling and disposal procedures for pesticide/herbicide contaminated soils, was not implemented since no contaminated soils were identified during preconstruction soil testing (see Section 2.1.3 above).

#### Hydrology and Water Quality

- **Use Non-potable Water (MM HYD-1).** As discussed in Section 2.1.3, contractor utilized a non-potable water line located on the east side of Leon Road for dust control, soil compaction activities, and site restoration/revegetation. No additional water sources were requested during construction.

#### Land Use and Planning

- **Property Access and Restoration (MM LU-1).** Throughout all phases of construction, all affected property owners within 300 feet of the VSSP right-of-way were always provided with at least one point of vehicular (passenger car and truck) and pedestrian access to their respective properties. Immediately following the completion of construction, areas affected by construction outside of the right-of-way were restored to their pre-construction conditions or to the conditions agreed upon between the landowner and SCE following completion of construction.
- **Coordination with School District (MM LU-2).** During construction, in coordination with the Perris Union High School District and Heritage High School, the contractor was required to schedule construction activities that were anticipated to result in noise levels greater than 75 A-weighted decibels and within 1,000 feet of the Heritage High School to occur outside of school hours (7:45 a.m. and 3:50 p.m.). The contractor also was required to schedule and/or re-route the arrival and departure of construction workers and equipment to avoid the peak morning and afternoon school commute periods along Highway 74 and Briggs Road. In September 2019, reconductoring which was conducted as night work near Heritage High School but no equipment over 75 DB was used. Prior to construction near Perris Union High School, Wilson and SCE coordinated with the engineers and school representative regarding new pole construction in the vicinity of the new high school along Leon Road.

#### Noise

- **Construction Work Hours (MM NOI-1).** Construction within the various jurisdictions affected by the Project occurred during the time frames noted below. If construction was required outside the noted days/times, SCE provided a minimum of five days advanced notification to the CPUC, the local jurisdiction,

and residences within 300 feet of the anticipated work, including a general description of the work to be performed, location, and hours of construction anticipated. As noted in Section 2.2.2, nightwork was required along McLaughlin and Briggs Roads, City of Menifee. In addition, the cable pull for the southern underground section was conducted at night. All construction traffic was also routed away from residences, schools, and recreational facilities to the maximum extent feasible.

- *County of Riverside*. If activities occur within one-quarter mile of an inhabited dwelling, construction shall occur between 6:00 a.m. and 6:00 p.m. from June through September and 7:00 a.m. and 6:00 p.m. from October through May.
- *City of Perris*. Between 7:00 a.m. and 7:00 p.m., Monday through Saturday. No construction is allowed on Sundays or legal holidays, with the exception of Columbus Day and Washington's Birthday.
- *City of Menifee*. If activities occur within one-quarter mile of an inhabited dwelling, construction shall occur between 6:30 a.m. and 6:00 p.m., Monday through Saturday, from June through September and 7:00 a.m. and 6:00 p.m., Monday through Saturday, from October through May. No construction is allowed on Sundays or nationally recognized holidays.
- *City of Temecula*. If the activities occur within one-quarter mile of an inhabited dwelling, construction shall occur between 7:00 a.m. and 6:30 p.m., Monday through Friday. Construction activities are only allowed between 7:00 a.m. and 6:30 p.m. on Saturdays. No construction activities are allowed on Sunday or nationally recognized holidays.

■ **Implement Best Management Practices for Construction Noise (MM NOI-2)**. During construction the contractor implemented the following noise-suppression techniques to reduce construction noise levels to the extent feasible:

- Use of mufflers and engine shrouds) that were no less effective than those originally installed by the manufacturer.
- Minimization of unnecessary construction vehicle idling time.
- Electric-powered equipment was used instead of pneumatic or internal combustion power equipment, where feasible.
- Use of noise-producing signals, including horns, whistles, alarms, and bells, was limited to safety warning purposes only.
- Where feasible, construction traffic was routed away from residences, schools, and recreational facilities.

A Project hotline was established where residents could call with questions or issues. All calls were returned by SCE and/or its contractor within 24 hours to answer noise questions and handle complaints. Documentation of the complaint and resolution was submitted to the CPUC monthly.

## Recreation

■ **Identify and Provide Noticing of Affected Recreation Areas (MM REC-1)**. As discussed in Section 2.1.3, no recreational areas were affected (closed or limited in use) by Project construction activities on Segment 1 or Segment 2.

## Traffic and Transportation

■ **Construction Traffic Control Plan (MM TRA-1, APM TRA-1)**. The requirements of approved Traffic Control Plans to minimize VSSP impacts on local streets, highways (SR-74 and SR-79), freeways, or other forms of transportation (Class I and Class II bicycle routes) were implemented during construction. This included the use of use of flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc., for all

locations of all road or traffic lane segments that would need to be temporarily closed or disrupted due to construction activities. Coordination with property owners and tenants at properties affected by access restrictions was conducted at least one week prior to any blockages. In addition, emergency service providers were notified in advance of the proposed locations, nature, timing, and duration of any roadway disruptions. For affected pedestrians and bicycles facilities. detours and/or other safe movement measures were implemented. No bus transit agencies or routes were affected by VSSP construction.

- **Comply with FAA 7460-1 Determination Recommendations (MM TRA-2).** During construction, FAA Form 7460-2, Notice of Actual Construction or Alteration, was e-filed within 5 days after construction of each structure reaching its greatest height (7460-2, Part 2). SCE provided Aspen with the thirty FAA Forms filed for the Project.

### 2.3.2 Non-Compliances during Construction

#### 2.3.2.1 Self-Reported

As described in Section 2.3.1, during construction, SCE provided monitors to ensure that construction activities were conducted in accordance with the required mitigation measures, APMs, permit conditions, and plan requirements. SCE developed a system to categorize and report on observed non-compliances as summarized below.

- **Observation and Maintenance Items** (Observation or Level OB) included observed field conditions that did not result in deviation from a Project requirement but may have resulted in a future incident if not addressed. Additionally, Observations were used to capture field issues that were not Project-related, but occur near the Project area (i.e., non-project related dumping of trash, driving outside of approved access routes, etc.). Regarding cultural or paleontological resources, observations involved isolated finds that were either not significant or lack historical information and were not indicative of a potential lack of compliance.
- **Level 1 Non-compliance Incidents** (Minor Incidents or Level 1) are activities that result in a minor deviation from a Project Requirement. Repetitive infractions of a particular Project Requirement can result in subsequent similar incidents being elevated to the next level.
- **Level 2 Non-compliance Incidents** (Moderate Incidents or Level 2) are activities that deviate from Project requirements and result in direct impacts to sensitive resources. Level 2 Non-compliance Incidents can be resolved without a significant delay in construction activities. However, if the problem is not addressed in a timely matter, or conditions continue to worsen, the incident can be elevated to the next level.
- **Level 3 Non-compliance Incidents** (Major Incidents or Level 3) are activities that significantly deviate from or violate Project Requirements and require notification to the regulatory agencies. These incidents require an immediate work stoppage and coordination with the agencies on a course of action.

Table 4 provides a summary of incidents by level and type as monitored by SCE and their contractors. All incidents and observations recorded during Project construction are documented in FRED. A total of 50 incidents were entered in FRED during construction.

**Table 4. Summary of Incidents by Level and Type**

Incident Level	Type	Total
Observation	Cultural/Paleo	3
Observation	AQ/SWPPP/Hazardous Materials	9
Observation	Biological	27
Level 1	Biological	8
Level 1	Aesthetics	1
Level 1	SWPPP	1
Level 1	Other/Multiple	1
<b>TOTAL</b>		<b>50</b>



### 2.3.2.2 CPUC EM Observations & Incident Reports

The CPUC EMs also monitored construction activities to ensure that they were conducted in accordance with the required mitigation measures, APMs, permit conditions, and plan requirements. As the CPUC EMs identified non-compliances, they reported their observations to their SCE/contractor counterpart(s). If the non-compliance was remedied in a timely and effect fashion, the CPUC EM observations were reported in the Monitoring Reports prepared and issued by Aspen. Conversely, if the non-compliance wasn't adequately remedied or self-reported, CPUC Incidents, Project Memoranda, and/or Non-Compliance Reports were issued depending on the severity of the infraction, consistent with the SCE non-compliance levels (see Section 2.3.2.1). Table 5 summarizes this CPUC EM non-compliance reporting.

**Table 5. CPUC EM Non-Compliance Reporting**

Date	Regulatory Requirement	Description
<b>OBSERVATIONS</b>		
06/11/19		Gaps between plate covering an open vault excavation.
06/18/19		Gaps between the foundation excavation and covering plate.
06/26/19		Delivery truck outside of approved disturbance limits.
07/10/19		1. Biological Monitor was unable to illustrate the reduced buffer for a red-tailed hawk. 2. Maps on Collector incomplete so unclear if access road in use was approved.
07/20/19		Uncovered water buffalo filled with water; potential wildlife entrapment.
09/05/19		Nighttime construction light bank aimed at residences along Briggs Road (see Figure 12).
10/19/19		Accumulated rock on shakers plates off of Menifee Road near UNK250.
12/03/19		Uncovered pipes at Valley Substation Yard.
<b>INCIDENTS</b>		
<b>Level 1</b>		
08-20-19	NTP requirement	Wood poles staged at Construction Areas not released for construction, Segment 1.
09-25-19	SWPPP/BIO-2/ AES-1	Construction equipment without secondary containment, staging area without screening, pipes without capping, and an open trench with gaps in covering (see Figure 13), Segment 1.
02-19-20	NTP/MMCRP	Distribution riser trenching outside of approved project disturbance limits between Construction Areas UNK44 and UNK45, Segment 1.
03-05-20	NTP/MMCRP	Weekly and daily reporting not adhering to the criterion stated in the MMCRP.
04-22-20	NBMP	Nest buffer reduction for a red-tailed hawk nest not managed in accordance with the Nesting Bird Management Plan (NBMP).
07-31-20	NBMP	No daily sweeps by a biological monitor for construction activities during the nesting season according to the NBMP.
<b>Level 2</b>		
None		
<b>Level 3</b>		
None		
<b>PROJECT MEMORANDUM</b>		
None		
<b>NON-COMPLIANCE REPORTS</b>		
None		



Figure 12. Construction night lighting directed at residences during overnight construction activities from Construction Areas UNK250 to UNK01



Figure 13. Uncapped pipes and a piece of construction equipment staged without secondary containment near UNK222

### 2.3.3 Safety Incidents

As required by the MMCRP, SCE was required to report on health and safety incidents consistent with the “self-identified potential violation” requirements of the CPUC’s Safety Citation Program and the Accident Reporting Requirements. Specific types of health and safety incidents to be reported under these programs include:

- A potential violation that poses a significant safety threat to the public and/or utility staff, contractors, or subcontractors.
- Any instance of fraud, sabotage, falsification of records and/or any other instances of deception by SCE’s personnel, contractors, or subcontractors, that caused or could have caused a potential violation, regardless of the outcome.
- Incidents that (a) result in fatality or personal injury rising to the level of in-patient hospitalization and attributable or allegedly attributable to utility owned facilities; or (b) are the subject of significant public attention or media coverage and are attributable or allegedly attributable to utility facilities; (c) involve damage to property of the utility or others estimated to exceed \$20,000 that are attributable or allegedly attributable to utility owned facilities.

Unanticipated events occurred that had the potential to impact project personnel and/or public safety. While these events did not result in a deviation from or violation of a mitigation measure or permit condition, it was important that these events be reported to the appropriate agencies and the CPUC, so they were in a position to respond to questions or concerns from the public or managers. Accordingly, the SCE EPM immediately reported these events to the Aspen/CPUC PM and to other regulatory agencies, as appropriate which were followed up with final electronic notification characterizing the event, actions taken, and outcomes. Potential safety incidents during construction that were reported on by SCE, included the following:

- On September 20, 2019, a safety stand-down was implemented after a near miss safety incident on the southern underground at UNK222. Cattrac crew members were within a vault with the bucket of an excavator when the bucket came into contact with a crew member. The crew member was not injured although a safety stand-down went into effect to address the safety incident. No work occurred at the subject location the remainder of the following week while Cattrac came up with a safety plan with Wilson to remedy the safety issue, including Wilson providing a full-time safety monitor during construction

activities. Work resumed on September 25 after additional safety protocols were put in place, as well as WEAP retraining of crews.

### 2.3.4 Public Complaints

As required by the MMCRP, the contractor maintained a Project Information Line during construction and assigned a dedicated Public Liaison to the Project that was responsible for tracking and handling public complaints. Public complaints could also be formally submitted to SCE and CPUC through email or the Project Information Line. Members of the public that had questions, concerns, or complaints on the Project would have been directed to the SCE Public Affairs Manager and Project Information Line. No public complaints were received by SCE for the duration of construction activities.

### 2.3.5 Final Inspection

On December 22, 2020, the CPUC EM conducted a final inspection of the Project in Segments 1 and 2. All disturbance area staking, ESA signs, and other construction material was cleared from the right-of-way except for that which was still in use for restoration activities.

## 2.4 Post-Construction Compliance

Many mitigation measures and permit conditions required activities be performed at the completion of construction. These activities are described below.

### Biological Resources

Project construction disturbance acreages by land cover type were tracked by SCE. In Segment 1, all TSPs, LWS, and wood poles were installed in disturbed/developed areas along road shoulders and areas mapped as agriculture. This resulted in permanent impacts of 0.04 acres. Temporary impacts to coastal sage scrub land cover are 0.015 acres. In Segment 2, one new wood pole in developed/disturbed land resulted in permanent impacts of 0.00007 acres. Temporary impacts to coastal sage scrub land cover are 0.024 acres. Restoration activities for temporary impact areas is on-going.

- **Implement Habitat Restoration and Monitoring Plan (HRMP) (MM BIO-4).** The intent of the HRMP is to restore temporarily disturbed areas to pre-construction conditions or better and provide for habitat creation/restoration resulting from permanent impacts to sensitive vegetation communities. Areas subject to restoration/revegetation are required to be monitored to assess progress and to make recommendations for successful habitat establishment. Restoration began on Segment 2 in January 2020 with the completion of construction activities. Restoration of Segment 1 began in December 2020. Monitoring was performed by a qualified biologist(s) knowledgeable in the area of habitat restoration specific to the on-site vegetation communities. Qualitative monitoring surveys were performed monthly in all restored/revegetated areas for the first year following planting in any phase of the VSSP. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion and approval by the appropriate regulatory agencies. Qualitative surveys assessed native plant species performance, including growth and survival, germination success, reproduction, and plant fitness and health as well as pest or invasive plant problems. Monthly and quarterly reports were submitted that summarized qualitative restoration monitoring results.
- **Quantitative monitoring will occur annually for years one to five or until the success criteria are met.** Based on these results, the biologist will make recommendations for maintenance or remedial work on the site and for adjustments to the approved seed mix. Annual site status reports that summarizes site conditions will be submitted to the appropriate regulatory agencies (i.e., USACE, CDFW, and CPUC) at the end of each year following implementation of the HRMP until the established success criteria have

been met. Each annual report will list plant species coverage and diversity measured during yearly quantitative surveys, compliance/non-compliance with required success criteria, species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, use of the site by wildlife, and the presence of invasive weed species. In the event of substantial non-compliance with the required success criteria, the reports will include remedial measures deemed necessary to ensure future compliance with specified performance criteria.

- **Conduct Protocol Surveys for Least Bell’s Vireo, Southwestern Willow Flycatcher, and Willow Flycatcher; Avoid Occupied Habitat (MM BIO-8).** Protocol or focused nest location surveys, as appropriate, were required to continue annually until completion of restoration activities.
- **Conduct Protocol Surveys for Coastal California Gnatcatcher (CAGN) and Avoid Occupied Habitat (MM BIO-9).** Protocol or focused nest location surveys, as appropriate, were required to continue annually until completion of restoration activities.
- **Complete Focused Pre-construction Stephens’ Kangaroo Rat (SKR) Burrow/Precinct Surveys and Implement Avoidance Measures (MM BIO-15).** A final monitoring report was submitted to the CPUC, CDFW and USFWS documenting results of pre-construction SKR surveys, implementation of avoidance measures, and on-site monitoring during construction.
- **Preparation of a Habitat Mitigation and Monitoring Plan (MM BIO-17).** Construction final impact acreages were submitted to the CPUC and acquisition of off-site lands was verified.

#### Cultural Resources

- **Final Reporting and Curation (MM CR-12).** No significant fossils were found during construction activities.

#### Hydrology and Water Quality

- SCE obtained its WDID# and implemented BMPs where necessary according to their Project Storm Water Pollution Prevention Plan (SWPPP). Inspections of BMPs were conducted on a weekly basis and pre- and post-storm events. Inspection logs were included in weekly reports provided to the CPUC EMs. Track-out and unstabilized construction entrances were an issue initially on Segment 1, particularly near the Valley Substation Yard and northern underground section of the alignment (see Figure 14). SCE worked with its contractor to stabilize all construction entrances along the right-of way and properly sweep any track-out caused by construction vehicles and equipment. In December 2020, the contractor closed out the SWPPP for the project and the NOT (Notice of Termination) is currently pending SCE approval.



Figure 14. Unstabilized construction entrance on west side of Menifee Road near the underground trenching

#### Transportation

- **Repair Roadways and Transportation Facilities Damaged by Construction Activities (MM TRA-3).** Based on preconstruction photographic or video documentation of existing transportation facility conditions near heavy vehicle ingress/egress points from public roadways before construction, any damage to

roadways were to be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by SCE and the affected jurisdiction. No road repairs were required for construction activities other than underground work.

### Field Management Plan

- **Field Management Plan.** SCE was required to submit a Field Management Plan (FMP) prior to construction addressing the VSSP design/construction regarding Electromagnetic Field (EMF) emission. In January 2021, SCE submitted a revised FMP to the CPUC. As provided in the revised FMP and additional clarification provided by SCE, due to an internal miscommunication and construction oversight within SCE, a portion of the VSSP was not constructed as proposed by SCE and not in accordance with the approvals of the CPUC. The primary impact of this change to the construction was in vicinity of the short underground line segment at Valley Substation, where the EMF will be in excess of what was originally identified in the Project's Field Management Plan; however, the extent of the underground segment is very short, with no sensitive EMF receptors in the vicinity. In addition, the cost to remedy the construction oversight would be costly, negating the no-cost aspect of the EMF mitigation that was originally approved for the project, and would either require outages of the 115 kV circuit or utilization of an overhead shoo-fly arrangement, which could entail potential environmental consequences due to additional ground disturbances. In consideration of these factors, the CPUC made an exception for the VSSP and accepted the revised FMP.