# Mitigation Monitoring, Compliance and Reporting Program

## Devers–Palo Verde No. 2 Transmission Line Project

# FINAL REPORT


*Prepared for:*
**California Public Utilities Commission**

*Prepared by:*
**Aspen Environmental Group**

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# FINAL REPORT
# Mitigation Monitoring, Compliance, and Reporting Program Devers–Palo Verde No. 2 Transmission Line Project

## Report Organization

**Section 1** provides a brief overview of the DPV2 Project. In addition, Chapter 1 outlines the role and responsibility undertaken by Aspen Environmental Group as the mitigation monitoring team, including pre-construction compliance review. The methods established for addressing non-compliance issues, changes in the project description or mitigation implementation, and extra workspace requirements are also discussed.

**Section 2** discusses the three distinct overhead 500 kV transmission line segments, plus construction yards and helicopter landing zones (HLZs).

**Section 3** describes and discusses construction of Colorado Rivers Substation, with **Section 4** presenting information on the construction of the new Red Bluff substation midway on the alignment.

**Sections 5 and 6** present information on modifications to Devers Substation and Valley Substation, respectively; and **Section 7** discusses other construction activities.

**Section 8** provides a comprehensive summary of post-construction requirements for the project, and **Section 9** presents monitoring issues and recommendations for future mitigation monitoring plans.

## 1. Introduction and Project Overview

This Final Report summarizes the monitoring activities conducted for Southern California Edison's (SCE's) Devers–Palo Verde No. 2 (DPV2) Transmission Line Project pursuant to the adopted Mitigation Monitoring, Compliance, and Reporting Program (MMCRP).

The DPV2 Project included the following:

- Installation of approximately 150 miles of 500 kV transmission line;
- Construction of Red Bluff 500/230 kV Substation;
- Construction of Colorado River 500 kV/230 kV Substation;
- Modification of the existing Devers and Valley Substations to accommodate the new 500 kV transmission line; and
- Other construction activities such as installation of series capacitors, telecommunications, and distribution lines and loop-in work.

The California Public Utilities Commission (CPUC), as the California Environmental Quality Act (CEQA) Lead Agency, and the Bureau of Land Management (BLM), as the National Environmental Policy Act (NEPA) Lead Agency, conducted the environmental review of the project and granted final approval for construction. On behalf of CPUC and BLM, Aspen Environmental Group implemented the MMCRP to ensure compliance with project mitigation measures, compliance plans, and permit conditions during all phases of construction on lands under the jurisdiction of these two agencies. The DPV2 Project also crosses lands on the San Bernardino National Forest (SBNF), under the jurisdiction of the U.S. Depart-

ment of Agriculture Forest Service (USFS). The right of way (ROW) on SBNF is within an existing Forest Service–issued easement. Aspen assisted the USFS in their monitoring of construction on SBNF.

PAR Construction (PAR) was awarded the contract by SCE for engineering and construction of the Project. Construction of DPV2 began in June 2011 with the establishment of some construction and helicopter yards. However, the majority of construction started in late 2011/early 2012, after the CPUC and BLM issued Notices to Proceed (NTPs) for overhead transmission line and substation construction. Most construction was completed by September 2013, including final cleanup. Site restoration work will continue into 2015 and beyond until such time that restoration success criteria is met. Construction of the access road to Red Bluff Substation start in August 2014 and will be completed by May 2015.

## 1.1 Overview of the SCE DPV2 Project

The CPUC voted on January 25, 2007, to approve the SCE DPV2 Transmission Line Project (Decision D.07-01-040). The proposed and approved project included lines in both Arizona and California. The portion of the project in Arizona was subject to that state's approval which never occurred. Subsequently, on May 14, 2008, SCE filed a Petition for Modification (PFM) of the existing Certificate for Public Convenience and Necessity (CPCN) approved per Decision D.07-01-040. SCE requested that the CPUC authorize SCE to construct DPV2 facilities in only the California portion of DPV2 and the Midpoint Substation (now called the Colorado River Substation) near Blythe, California. The CPUC approved SCE's PFM on November 20, 2009, in Decision D.09-11-007.

After the CPUC's 2009 Decision regarding the PFM, several large solar power projects were proposed in the vicinity of Blythe and Desert Center, Riverside County. SCE filed Permit to Construct (PTC) applications for relocation and expansion of the Colorado River Substation and construction of a new Red Bluff Substation. These two components were not covered in the original DPV2 Final EIR/EIS, because the solar power projects had been proposed at that time. Supplemental environmental review was conducted for these substations. The Colorado River Substation Expansion and the Red Bluff Substation were both approved by the CPUC on July 14, 2011, in Decisions D.11-07-011 and D.11-07-020, respectively. The CPUC also adopted a MMCRP to ensure compliance with all mitigation measures imposed on the DPV2 Project during its implementation.

The BLM issued a Record of Decision (ROD) approving the Project on July 19, 2011. The Project also crosses lands under jurisdiction of the U.S. Department of Agriculture Forest Service on the San Bernardino National Forest within an existing Forest Service–issued easement. The Forest Service issued a revised easement/Notice to Proceed signed by the Forest Supervisor in August 2012.

## 1.2 Role of Aspen Monitoring Team

The Aspen Monitoring Team comprised the Program Manager (Susan Lee), Project Manager (Vida Strong), and the following support staff:

- Ryann Loomis (Lead Environmental Monitor [EM])
- Rosina Goodman (full time field EM)
- Jamie Miner (full time field EM)
- Carla Wakeman (part time field EM)
- Hedy Koczwara (pre-construction compliance)
- Fritts Golden (oversight and public liaison)
- Scott Debauche (helicopter construction and safety)
- Debbie Clayton (bird nesting)
- Helix Environmental Planning, Inc. (Mojave fringe-toed lizard monitoring staff)

Aspen's Program Manager, Susan Lee, had the authority to commit Aspen Team resources and was responsible for all contractual matters. Aspen's Project Manager, Vida Strong, supervised all project monitoring activities, including preparation of weekly reports. Other responsibilities included managing the field monitoring team, reviewing non-compliance documentation, overseeing the issuance of Project Memoranda and Non-Compliance Reports, and preparing recommendations for CPUC's consideration on Notices to Proceed and Variance Requests.

The CPUC EMs reviewed pre-construction compliance documentation for completeness and performed in-field monitoring for compliance with mitigation measures, approved plans, and agency requirements during all construction activities. In the field, they served as the main point of contact for SCE, as well as for a variety of federal, State, and local agencies. CPUC EMs prepared and submitted daily and weekly compliance reports to the Aspen Project Manager. The CPUC EMs also provided field input on Variance Requests and attended meetings held by SCE and its contractors. The CPUC EMs had backgrounds in a number of disciplines, including environmental science and biology, and were experienced in compliance monitoring. In addition to the EMs, the EIR/EIS team specialists assisted with plan, NTP, and variance reviews, as needed.

Documentation of the project, including from the environmental review process and the monitoring program, was posted on the CPUC-maintained DPV2 Project website:

http://www.cpuc.ca.gov/environment/info/aspen/dpv2/dpv2.htm

## 1.3 Pre-Construction Compliance Review and Notices to Proceed

The compliance plans submitted by SCE to satisfy federal and State agency requirements are provided in Appendix 1. These compliance plans were reviewed by Aspen prior to the start of construction to ensure that appropriate environmental protection would take place. In addition, Aspen tracked permitting requirements to ensure that all applicable agency permits had been issued prior to construction. Permits issued for the project are listed in Appendix 2.

As part of the SCE Worker Environmental Awareness Program (WEAP), all personnel working on the project were required to attend an environmental training session before they could begin work in the field. SCE's environmental representatives presented the training, which covered environmental and cultural resource issues, State and federal laws, and reporting procedures.

When the required pre-construction compliance documentation was submitted and deemed satisfactory, recommendations for Notices to Proceed (NTPs) were prepared by Aspen for CPUC's consideration. A total of 16 NTPs for Construction were issued by the CPUC for the DPV2 Project (see Appendix 3). Once necessary approvals from other agencies were received, SCE could commence construction in accordance with the NTPs for Construction and issued permits.

## 1.4 Compliance Monitoring

Compliance monitoring by the CPUC EMs chronicled and documented SCE's compliance with project mitigation measures, compliance plans, and permit conditions. Compliance monitoring was implemented to confirm that the project was implementing all required measures and permit conditions, as imposed by the agencies to minimize or eliminate potential significant impacts and to protect environmental resources. Non-Compliances were defined as "any deviation from applicable mitigation measures, applicant-proposed measures and project parameters, permit conditions or requirements, and approved plans." A Project Memoranda was a written warning of an activity being in non-compliance.

Non-Compliance Reports were issued when chronic non-compliant activity occurred or when there appeared to be a blatant disregard for project mitigation measures, compliance plans, or permit conditions. Project Memoranda and Non-Compliance Reports typically were issued after a verbal warning. The compliance record for each DPV2 Project component is discussed in Chapters 2 through 4. Appendix 4 lists the Project Memoranda and Non-Compliance Reports issued for the Project.

## 1.5 Coordination and Communications

In-field communications were conducted by the CPUC EMs with SCE's Environmental Coordinators and other project personnel. Verbal warnings and written communications (Project Memoranda or Non-Compliance Reports) were used to notify SCE and its contractors of non-compliant activities. Field observations were logged daily by the CPUC EMs. Weekly reports documenting compliance, requested project changes, construction progress, and interactions with agencies were submitted to CPUC and other agencies.

## 1.6 Variance Requests and Determinations of NEPA Adequacy

Variance Requests were submitted by SCE to the CPUC for minor project refinements that resulted from final engineering changes or construction needs such as additional workspace and access roads. The variance was required to: occur within the geographic boundary of the study area of the Final EIR/EIS and Supplemental EIR, and not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact based on the criteria used in the environmental documents; conflict with any mitigation measure or applicable law or policy; or trigger an additional permit requirement.

Each of the 92 Variance Requests submitted by SCE were first reviewed by Aspen for completeness and to ensure it met these variance criteria. If incomplete, a request for information was prepared by Aspen and sent to SCE. When complete, each request was analyzed, including field verification and resource/ local agency consultation, to confirm that there would be no new impacts or an increase in significant impacts. After analysis of the request, Aspen prepared a written recommendation of approval or denial for the CPUC. As appropriate, previously adopted mitigation compliance conditions were included along with any needed additional information and clarifications regarding mitigation or agency requirements. The 92 CPUC Variance Requests submitted for the DPV2 Project are presented in Appendices 5 thru 9.

# 2. 500 kV Transmission Line Segments

## 2.1 Description and Construction of 500 kV Transmission Line Segments

For construction, the 500 kV transmission line was separated into three segments: Colorado River Substation (CRS) to the Red Bluff Substation; Red Bluff Substation to Devers Substation; and Devers Substation to Valley Substation (see Table 1). Once an NTP was issued for a segment, SCE delineated the disturbance area boundaries in the field and biologists completed pre-construction surveys for biological resources at each tower and ancillary work sites. When the survey report was completed, the CPUC EMs field verified the information and released the site for construction. Appendix 10 presents the biological resources identified at each tower site during required surveys.

The scope of work for each segment was generally the same. Construction activities began with vegetation clearing and grading of spur roads and crane staging pads. Foundation installation included drilling,

setting steel, and pouring concrete for tower foundations, followed by tower assembly. When tower assembly was finished in a segment, wire stringing was conducted to install the conductor and Optical Grounding Wire (OPGW). To facilitate conductor wire stringing, additional sites were cleared and sometimes graded. Upon completion of all construction activities, a second grading crew stabilized the site and established the permanent stub roads. Forty-two towers were inaccessible by road and were constructed using helicopters. For these, vegetation clearing was conducted by hand clearing and large boulders were broken using an expansive demolition grout compound called Dexpan (see Figure 1). Foundation drilling was accomplished using a micropile drill and towers sections were assembled with an Air Crane helicopter.

*Figure 1. This boulder at Tower 1034 is being prepared for Dexpan to break up rock.*

For each stage of construction, the CPUC EMs conducted site visits to ensure all mitigation measures and permit conditions were being met and the appropriate monitors employed by the utility were onsite. All observations of violations of mitigation measures and permit conditions that were either documented by SCE or observed by the CPUC EMs were discussed with SCE and included in the weekly reports generated by the CPUC EMs. Several discoveries of archaeological and paleontological resources were made along the transmission line. For each instance, the proper procedures as outlined in the Historic Properties Management Plan (HPMP) and Paleontological Monitoring and Treatment Plan (PMTP) were followed to catalogue and document the finds.

**Table 1. Components of the DPV2 500 kV Transmission Line**

| Project Component | Total Towers | Conventional Towers | Helicopter Construction Towers | Construction Start Date | Energization Date |
|---|---|---|---|---|---|
| –CRS to Red Bluff transmission line | 91 | 91 | 0 | 1/16/2012 | June 2013 |
| Red Bluff to Devers transmission line | 278 | 269 | 9 | 9/19/2011 | June 2013 |
| Devers to Valley transmission line | 142 | 109 | 33 | 1/19/2012 | 9/29/2013 |
| Colorado River Substation | NA | NA | NA | 9/26/2011 | 6/19/2013 |
| Red Bluff Substation | NA | NA | NA | 9/26/2011 | 6/6/2013 |
| Devers Substation | NA | NA | NA | 6/14/2012 | NA |
| Valley Substation | NA | NA | NA | 7/19/2012 | NA |

### 2.1.1 Colorado River Substation to Red Bluff Substation Segment

The CRS to Red Bluff Substation (CRS to Red Bluff) segment begins at Tower 2648 located north of CRS, near Blythe, California and travels west approximately 31 miles to Tower RB2-5E located south of the new Red Bluff Substation. NTP #8 for the CRS to Red Bluff segment was approved by the CPUC on December 2, 2011. The BLM issued NTPs for construction of the Red Bluff and Colorado River Substations and the overhead transmission line on its lands in September 2011. Construction activities began in January 2012 and progressed in a generally sequential linear fashion west from CRS to Red Bluff. This segment was energized in June 2013.

The scope of work consisted of the construction of stub roads, foundations, assembly of 91 lattice steel towers (LSTs) (see Figure 2), and the installation of associated hardware assemblies and interconnecting wires.

### 2.1.2 Red Bluff Substation to Devers Substation Segment

The Red Bluff Substation to Devers Substation (Red Bluff to Devers) segment begins at Tower RB2-1W, located on the existing transmission right-of-way (ROW) south of the new Red Bluff Substation and travels approximately 81 miles west to Tower 2000A, constructed within the existing Devers Substation. The scope of work consisted of construction of stub roads, foundations, assembly of 278 LSTs, and the installation of associated hardware assemblies and interconnecting wires. Nine towers in this segment were not accessible by road and were built using helicopters.

A number of tower sites in this segment contained naturally occurring desert pavement. An appointed SCE monitor assisted the contractor in flagging areas where impacts could be avoided and monitored stockpiling of all other desert pavement removed for construction (see Figure 3). Once construction at the site was complete, SCE replaced the stockpiled desert pavement within the temporary disturbance area and treated it according to the approved Project Desert Pavement Plan.

Due to the timing of construction relative to certain environmental protection requirements, two NTPs were approved for construction activities. NTP #2, approved on September 9, 2011, was for the installation of Coachella Valley Fringe-toed Lizard (CVFTL) and Flat-tailed Horned Lizard (FTHL) exclusionary fencing at 41 tower sites (see Figure 4). SCE identified these sites as areas requiring fencing in 2011 in order for construction activities to begin within the inactive season for these lizards. Additional sites were fenced in 2012 when the active season commenced.

*Figure 2. Assembly of Tower 2649 and CR1-2W.*

*Figure 3. Stockpiled Desert Pavement clearly defined at Tower 2529.*

*Figure 4. Installation of CVFTL/FTHL exclusionary fencing at Tower 2211.*

NTP #9 for all other construction activities was approved on December 2, 2011. Construction activities began in January 2012 and progressed from both ends of the segment until all towers were complete. Wire stringing activities began at the Red Bluff Substation and headed west. This segment was energized in June 2013.

### 2.1.3 Devers Substation to Valley Substation Segment

The segment of the project from Devers Substation to Valley Substation (Devers-Valley) begins at the Devers Substation near Palm Springs, California, and travels approximately 41 miles along existing ROW to the Valley Substation in Menifee, California. NTP #10 was issued for this segment on December 2, 2011. Towers 1037 through 1048 within this segment are situated on San Bernardino National Forest (SBNF) requiring a separate NTP issued by the USFS in August 2012. The scope of work for the Devers-Valley segment consisted of construction of stub roads, foundations, assembly of 141 LSTs, erection of one tubular steel pole, and installation of associated hardware assemblies and interconnecting wires (see Figure 5). Thirty-three towers, including all of the towers on USFS land, were not accessible by road and were built using helicopters.

*Figure 5. Conventional foundation drilling at Tower 1061.*

Within the Devers-Valley segment was the DPV1 Minor Relocation to accommodate DPV2 Towers 1061 through 1064. The scope of work was consistent with activities for Devers-Valley except with the addition of removal of structures, foundations, associated hardware assemblies, and interconnecting wires for three existing DPV1 Towers (M15-T1, M15-T2, and M15-T3).

Construction activities began in January 2012 but came to a near halt during the nesting season of that year due to the prohibitive amount of nests, impacting most of the transmission line. Construction activities resumed in August 2012, once nesting activity slowed down in the area. Wire stringing was completed in a linear fashion from the Devers Substation to Valley Substation, with the exception of Towers 1032 through 1051. This portion was helicopter access only and was subject to high winds in Summer 2013. During August 2013, the Silver Fire, which burned through large portions of the Banning and Idyllwild area, further delayed stringing activities. Towers 1038 through 1050, and 1067 through 1070 were directly affected by the fire but the structures remained intact without any repairs needed. A contractor maintenance crew was deployed to repair and replace any Best Management Practices (BMPs) that were burned during the fire. The line was energized on September 26, 2013.

During construction, SCE avian specialists discovered coastal California gnatcatchers (CAGN) on the DPV2 ROW near seven tower locations (1112, 1113, 1123, 1124, 1130, 1131, and 1132) and several temporary guard structures. Previous surveys of the alignment did not identify CAGN habitat, resulting in impacts that were not mitigated. To mitigate for the loss of habitat, SCE applied for a Certificate of Inclusion as a Participating Special Entity (PSE) in the Western Riverside County Multi-Species Habitat Conservation Plan. This was approved by the Riverside Conservation Authority and the USFWS on January 16, 2013. After approval, SCE's contractor identified additional changes needed to several guard structures for the completion of wire stringing activities. These changes were sent to the RCA and an addendum was approved on July 16, 2013.

## 2.1.4 Construction Yards and Helicopter Landing Zones

Construction Yards for the DPV2 Transmission Line were situated at strategic locations along the route and typically were located at existing facilities and in industrial zones. There were 13 yards used for the project: Blythe Yard, Desert Center 1, Desert Center 2, Desert Center 3, Chiriaco Summit, Indio 1, Indio 2, Devers 1, Devers 2, Beaumont 1, Beaumont 2, Menifee, and Perris Yards. Construction yard establishment consisted of clearing or grubbing, grading, and installation of BMPs, fencing, lighting, and temporary power.

*Figure 6. Tower components and equipment storage at the Menifee Yard.*

Activities within the yards included vehicle parking, crew marshaling, welding and torching, material delivery and storage, equipment storage, waste material collection for recycling and disposal, and general office and security activities (see Figure 6). The development of the construction yards were approved under NTPs 1, 3, 4, 11, and 12 (see Appendix 3). As construction activities decreased in an area, the construction yards were cleaned out and restored to their previous condition. In several cases, landowners requested that SCE leave improvements in place. SCE submitted and the CPUC approved six of the yards (Beaumont 1, Perris, Indio 1, Desert Center 1, Desert Center 2, and Devers 1) to remain as permanent construction yards under Variance Request #85.

*Figure 7. Helicopter Operations at HLZ H1X.*

Due to environmental, constructability, and safety concerns in the steep areas in a section of the Devers to Valley segment and several locations within the Red Bluff to Devers segment, helicopter aided construction was used, requiring areas for temporary helicopter landing. There were 9 temporary Helicopter Landing Zones (HLZs): H1E, H1A, H1X, H2, H2A, H4, H5, H7, and H9, located within or adjacent to the ROW. Activities at the HLZs included staging and transporting personnel, equipment, and tools to tower sites, equipment storage, tower and insulator assembly, installing wire stringing sheaves, pulling cable, and wire pulling (see Figure 7). Once helicopter-aided construction was completed in an area, the associated HLZ's improvements were removed and the sites were stabilized.

## 2.2 Helicopter Construction

### 2.2.1 Helicopter Operations Understanding

In June 2012, at CPUC's request, Aspen drafted a Helicopter Operations Understanding (Understanding) for DPV2 helicopter-supported construction. It was based on information provided by SCE regarding how it would be using helicopters during construction of DPV2 and CPUC/Aspen's expectations based on previous experience with helicopter use during construction on other transmission lines. CPUC and SCE agreed that the Understanding was the basis for how helicopter operations would be conducted. It identified towers to be constructed by helicopter, specified landing zones and how they would and would not be used, and established safe rigging and hauling requirements, flight management practices, and flight data management. The Understanding required flight tracking and data archiving for future reference.

By mutual agreement, the Understanding was revised as needed to address specific unanticipated issues that arose. This included:

- Allowing limited retrieval (picks) of materials from flatbed trucks positioned on access roads, rather than from HLZs, in order to avoid flying suspended loads over the energized DPV1 line.
- Allowing use of some previously disturbed tower sites as locations for assembling and picking some tower sections, as the HLZs proved to be too small to accommodate all of the tower section assemblies needed for helicopter construction.

### 2.2.2 Helicopter Construction Compliance Monitoring

All project helicopters were equipped with aviation-specific Global Positioning System (GPS) units. Each GPS unit displayed current information on areas where flight restrictions applied. The data identified nesting bird locations, sensitive habitat/receptors, flight corridor restrictions, etc. Pilots were able to view on the GPS screen the helicopter's position in relation to buffers, corridors, and other pertinent restrictions. The GPS unit also tracked and recorded flight data every 3–4 seconds. Each GPS 'ping' recorded date, time, latitude/longitude, distance above ground level (AGL), speed, and direction. Onboard GPS flight tracking data were downloaded and emailed daily to a designated SCE specialist for archiving.

A daily helicopter schedule was emailed to all relevant construction personnel and agency representatives, identifying the numbers and types of helicopters to be used, the HLZs to be used that day, and the type and location of planned work.

With this information, compliance monitoring was achieved through a combination of field observation and regular review of helicopter GPS data. Due to the geographic extent of construction, the onboard GPS data were critical to monitoring compliance. CPUC EMs and helicopter construction specialists met with SCE weekly to review flight data, which included, but were not limited to: potential helicopter issues observed by field monitoring, spot checks based on helicopter work activity in areas near sensitive receptors or nesting bird buffers, and any public/agency complaints received. Detailed weekly reports were then sent to the entire CPUC team.

A number of compliance issues occurred during helicopter construction:

- Appendix 11 presents the 43 nesting bird buffer violations were identified (of these, 26 were identified during CPUC flight data reviews and 17 were self-reported by SCE).
- On October 25, 2012, C-GSYU (H-500) dropped an external load (wooden planks exited a metal transport basket) between towers 1032 and 1033. The wood planks were retrieved and SCE took immediate corrective action by briefing all riggers that items of this type with large planar surfaces must be fastened securely together to fit completely in the basket and be fastened securely to the basket.

- On November 11, 2012, N818MC (A-Star) dropped an external load (tool bag) within CRS. On November 19, a safety stand down meeting was held with rigging crews to discuss the incident and stress the importance of properly securing all loads before flying.
- On January 22, 2013, dust generated by Air Crane operations at HLZ H2 resulted in a public complaint to the South Coast Air Quality Management District (SCAQMD). An SCAQMD inspector was dispatched to the site and made visual and video observations of excessive dust generated by the air crane. After review of the incident, SCAQMD issued SCE and PAR a Notice of Violation (NOV) on February 12, 2013.
- On February 18, 2013, N184CH (Vertol) dropped an external load (12 centralizers strung on a rope and attached via hook to a long line) between towers 1049 and 1048. A safety alert was immediately sent out to stress importance of properly securing all loads before flying.
- On June 11, 2013, N569KB (K-Max) dropped an external load (micropile drill deck platform leg) that fell on USFS land near tower 1034 (see Figure 8). Immediate coordination with the USFS occurred to retrieve the leg. A stand down meeting was conducted with crews discussing incident causes and steps to prevent reoccurrence.

*Figure 8. Micropile drill deck platform leg that dislodged and fell from the helicopter (Photo courtesy of FRED).*

## 2.3 Nesting Bird Buffer Reductions

During the 2012 breeding season, SCE requested nesting bird buffer reductions from the CDFW. However, for the 2013 breeding season, the CDFW stated that there had been a clarification on CDFW policy and that it would no longer be commenting on buffer reduction requests or issuing buffer reductions, per se. As a result, the task of considering whether buffer reductions were acceptable was redirected to the CPUC. Aspen subcontracted with HELIX Environmental Planning, Inc. (HELIX) to address the requests in coordination with BLM. A 2013 Nesting Summary was prepared by HELIX and is presented in Appendix 12.

In February 2013, the CPUC began receiving requests for buffer reductions, but these were without adequate information to assess the requests. A standardized process was put in place in April 2013 through coordination with the CPUC, Aspen, HELIX, and SCE. During the nesting season, several variances to the standardized process were submitted and approved, with conditions, for low-intensity construction activities, helicopter-only activities, and removal of equipment. A chief issue throughout implementation of the process was conflicting opinions between the CPUC/BLM representatives and SCE about what constituted enough risk to the nest or nesting birds to warrant stopping, or at least temporarily halting, construction.

Appendix 13 presents the 246 nests for which approximately 385 nest buffer reduction requests (there were multiple requests per nest for some) were submitted by SCE and reviewed by Aspen/Helix from February through late July 2013. Of these, 26 were not accepted because it was believed that the proposed work would pose too great a risk to the nest or nesting birds. SCE and its contractor were generally able to redirect work and return to the site when the nest had fledged. During the 2013 nesting season, SCE reported (in its Field Reporting Environmental Database [FRED]) no project-related nest failures, with or without reduced buffers.

Throughout the 2013 nesting season, a total of 52 DPV1 and 141 DPV2 towers had marine buoys installed on them to deter nesting in the towers. Of the total 193 towers with buoys, 14 had observed nesting during the 2013 season as presented in Appendix 14. Since nesting bird surveys and monitoring did not occur once construction was complete in an area, it is possible that additional nesting occurred in towers with deterrents but went unobserved. The observations from the 2013 nesting season suggest this type of nest deterrent may only be somewhat effective at deterring nesting on tower bridges, but may be ineffective at deterring nesting on other tower locations.

SCE found it necessary to remove partially-constructed nests due to the time-critical nature of the nests' status and project construction work plans. SCE reported removing a total of 10 partially constructed nests of the western kingbird (6), cactus wren (2), and house finch (2) from HLZs and tower sites. Notifications for the need to remove nests were sent to the CDFW; the CPUC was not involved in review or approval of these actions.

## 2.4 FAA Lighting and Marker Balls

Appendix 15 presents the towers for which SCE was required by the Federal Aviation Administration (FAA) to install safety beacon lighting on some towers and place marker balls on the OPGW wire on some tower spans where these components posed a risk to aviation. SCE submitted a Project Modification Report to the CPUC in July 2012 that described how SCE would implement these FAA recommendations for marking and lighting. For each recommendation, SCE had five days to install the lighting or marker balls once the tower reached maximum height or once OPGW wiring was complete. The CPUC EMs recorded when these activities took place and reviewed SCE's submittals to the FAA.

## 2.5 Non-Compliance Events during Transmission Line Construction

CPUC EMs issued 12 Project Memoranda (PM) and 16 Non-Compliance Reports (NCRs) during construction of the 500 kV transmission line as presented in Appendix 4 The majority of the non-compliance events involved work outside of approved disturbance area boundaries or access road limits, uncovered steep-walled excavations, work within established ESAs for nesting birds, and uncontrolled fugitive dust. Additional non-compliance issues dealt with SCE monitor absence during construction activities, work occurring at sites not released for construction by the CPUC, and failure to comply with conditions of a variance request. For each instance, the CPUC LEM identified suggested corrective actions and required SCE to respond with details on how issues would be resolved. The CPUC EMs then confirmed in the field that all corrective actions were put in place.

Work outside of disturbance area boundaries or access road limits (see Figure 9) and open steep-walled excavations (see Figure 10) were the issues on the project with the most PMs and NCRs issued: four PMs and nine NCRs. Excavations represented a risk to wildlife that might be entrapped. In August 2012, the CPUC sent SCE a letter regarding repeated non-compliance issues on the project. SCE responded with corrective actions including: increased communication between biological monitors and crews; installing additional staking where previous incidents have occurred or where potential incidents may occur; and implementing

*Figure 9. Semi-truck drove off the approved access road in desert tortoise habitat while attempting to turn around near Tower 2326.*

supplemental WEAP training. The CPUC EMs confirmed these corrective actions were put in place, although equipment and vehicles driving outside of the approved road limits continued to be an issue throughout construction activities. With regard to open excavations, once the foundation drilling crews began using the appropriate equipment (heavy cloth and wood beams) to cover the open excavations, the number of incidents dropped significantly.

Non-compliance events regarding nesting bird mitigation measures were also a major issue throughout construction activities resulting in three PMs and two NCRs. The majority of the incidents involved crews working within or helicopters flying within the buffer of an active nest. SCE was required to place additional ESA signs and provide biological monitors with up to date information on all nesting bird buffers. The CPUC EMs confirmed with the monitors during site visits that this information was readily available in the field. Helicopter GPS tracks were reviewed for any buffer incursions by the aircraft, as described in Section 2.2.2.

*Figure 10. Inadequate covering of open steep-walled excavation at Tower 2126.*

For all construction activities, SCE's biological and general monitors reported on environmental compliance in its FRED system. Issues common throughout construction included: crews starting work prior to the site being "swept" by an SCE monitor for biological resources; repairs needed on BMPs or exclusionary fencing; diesel fuel or lubricant leaks or spills; trash; speeding; and fugitive dust. Each reported incident was handled directly by the biological monitors or sent to SCE's Environmental Management. All incidents were provided to the CPUC EMs in weekly monitoring reports through FRED. When the CPUC EMs observed trends in incidents, they would discuss resolutions with SCE's Environmental Management during weekly meetings. The monitors also reported sightings of sensitive species such as desert tortoises, Mojave fringe-toed lizards, and Coachella fringe-toed lizards as well as any sensitive species relocations from access roads or disturbance areas.

## 2.6 Variances Requested for Transmission Line Construction

A total of 75 CPUC and 39 BLM Variance Requests were submitted and approved for transmission line construction (see Appendix 5). A project wide variance request was submitted and approved to extend project work hours to 24 hours/7 days a week, consistent with County noise ordinances. A Variance Request also was submitted to the USFS for engineering modifications to sites on San Bernardino National Forest land and was approved on March 20, 2012. The majority of the variance requests were for additional access roads, pull site location changes, and final engineering revisions.

Twenty-four Temporary Extra Workspace (TEWS) requests were submitted and approved, (see Appendix 16)with the majority of the requests being for the use of existing roads and for extensions of guard structure sites in previously disturbed habitat.

## 2.7 Final Inspection of 500 kV Transmission Line

Final inspection of the transmission line by the CPUC EMs began in October 2013. The final inspection of the transmission line included the CPUC EMs driving the entire alignment to ensure all disturbance area staking, ESA staking, access road signs, and general construction debris were removed from Project work

areas. When staking or construction debris was noted in the field, the EM notified SCE. Once completion of all of the corrective actions was confirmed by SCE, the EM field verified with site visits. Final inspection of sites requiring restoration was completed to the extent feasible; however, at the time of this Final Report some restoration activities are still in progress.

## 2.8 Restoration of 500 kV Transmission Line

A Habitat Restoration and Compensation Plan (HRCP) was approved by the CPUC in December 2012. As part of the plan, topsoil salvage occurred during construction activities at sites where post-construction restoration for biological or visual resources was required. This topsoil was spread during site stabilization activities in September 2012. In 2013, SCE notified the CPUC that many restoration activities would not begin until Fall 2014, although some restoration activities occurring in 2013 at sites requiring per the Project Stormwater Pollution Prevention Plan (SWPPP) and sites on Devers-Valley for which the appropriate seed mix was available. CPUC representatives met with SCE to discuss their reasoning and SCE responded saying that the utility would like to wait a year to see which habitat restored on its own and then would evaluate which sites would need reseeding on a case-by-case basis. SCE created a Habitat Restoration Execution Plan that was submitted to the CPUC in October 2013, detailing how SCE planned to maintain its SWPPP and evaluate sites for reseeding in Spring 2014.

SCE began the execution of its Habitat Restoration Execution Plan in December 2013 on the Devers-Valley segment of the alignment. Restoration activities at 110 sites included site preparation (hand-raking or deep ripping), and the application of specific hydroseed mixes to temporary disturbance areas at tower sites, pull sites, and guard sites. These activities were completed in March 2014.

SCE performed its annual restoration monitoring from April through June 2014, and in August 2014 submitted its DPV2 Annual Restoration Monitoring Report, providing recommendations for future restoration efforts. In the report, SCE stated 18 sites had met all success criteria and requested these sites be removed from further restoration. Thirty-four sites will be reseeded in Fall 2014 along with sites from Devers Substation to CRS that were not seeded in the previous restoration effort. Appendix 17 summarizes the restoration status of the Devers-Valley sites as of September 2014.

As reported by SCE in December 2014, restoration seeding for DPV2 sites (Devers to CRS, desert areas for Devers to Valley, and selected reseeding for grassland, chaparral, and RSS sites for Devers to Valley) are anticipated to start in January 2015. Annual restoration monitoring will be conducted for all sites in the spring 2015 and any necessary reseeding will be conducted in the fall/winter of 2015, as needed. Ongoing monitoring and reporting for weeds and transplanted cactus along the transmission line will occur during 2015.

# 3. Colorado River Substation

## 3.1 Description of Colorado River Substation

CRS, located approximately 7.2 miles southwest of Blythe, California, was constructed to interconnect new power generation in the Blythe area, loop in of the existing DPV1 500 kV transmission line, and be the termination of the DPV2 transmission line. The substation site is approximately 90 acres of permanent disturbance with additional area for berms and drainage features. The substation includes a Test and Maintenance building, Mechanical and Electrical Equipment Room (MEER) building, switchracks (220 and 500 kV), transformers, busses, circuit breakers, a shunt line reactor bank, and disconnect switches to loop-in the DPV1 transmission line and to terminate the new DPV2 transmission line. The substation site and access road lie within Critical and Occupied Desert Tortoise Habitat and Kit Fox Habitat.

The NTPs to start construction of the substation was approved by the BLM on September 19, 2011, and by the CPUC on October 17, 2011.

## 3.2 Construction of the Colorado River Substation

Construction of the CRS began with the installation of desert tortoise exclusionary fencing along the perimeter of the site and the drilling of a deep-water well for construction and long-term use. Once the well was operational, clearing and grading activities began, along with the creation of the stormwater detention basin near the southwest corner of the substation and the installation of a septic system and leach field. Throughout construction, SCE submitted water usage logs to document the amount of water drawn from the well. Once the grading was complete, assembly of the overhead components and buildings began (see Figure 11). The substation was energized on June 19, 2013.

*Figure 11. Construction of the MEER building at CRS.*

*Figure 12. Road paving activities along the primary CRS access road.*

In addition to the substation site, SCE widened and paved the existing transmission line access road paralleling the DPV1 transmission line between the substation site and Wiley's Well Road. The road was improved to a width of 28 feet. Construction activities included compacting subsurface soils and placing a 4-inch layer of asphalt concrete over a 6-inch layer of compacted aggregate base (see Figure 12). Heavy thunderstorms in Summer 2012 caused a significant amount of damage to the road and additional disturbance areas were requested and approved to make improvements and repairs to the road. Variance #53 was approved the end of 2012 for roadway improvements which continued into 2014.

During the clearing and grading of the substation site and access road, a number of unanticipated culturally significant discoveries were made. In each instance, SCE followed proper protocols outlined in the HPMP and contacted the appropriate agencies.

As part of the construction of the substation, SCE installed one way doors at occupied dens to remove all kit foxes from within the CRS grading limits. Camera stations were also employed and monitors specifically approved for kit fox monitoring were onsite to oversee the effort. In November 2011, the BLM sent SCE a letter regarding mortalities to kit foxes as a result of canine distemper at the Genesis Solar Project site, located in the same general region as CRS, and requested SCE to stop all hazing activities and remove all one way doors until further direction by the BLM. A protocol was developed by the CDFW for monitoring desert kit foxes during construction activities at CRS, which allowed SCE to eventually begin hazing again. SCE continued to report the results of its kit fox monitoring to the BLM, CPUC, and wildlife agencies throughout construction.

## 3.3 MFTL Access Road Monitoring

An increasing mortality rate of Mojave fringe-toed lizards (MFTL) was observed during construction of CRS and its access road, with the majority of the losses being attributed to vehicular causes. This concerned both the BLM and CPUC when the number reached over 103 recorded mortalities. On October 1, 2012, the BLM sent a letter to SCE stating that this level of recorded MFTL mortalities was not anticipated nor analyzed in the DPV2 Final EIR/EIS and Supplemental EIR analyses; the letter included a list of actions to ensure the level of project mortalities decreased. Within the week, SCE added temporary speed bumps, additional speed limit signs, and full-time biological monitoring during the active season to monitor the road, and provided additional WEAP training to personnel working in the area (see Figure 13). The CPUC also added a dedicated CPUC Biological Monitor to the Project team to monitor the CRS access road. Daily reports documenting the CPUC Biological Monitor observations were submitted to BLM, CPUC, and SCE for both the 2012 and 2013 active seasons for MFTL. With these actions in place, the CPUC EMs observed a decrease in the number of mortalities; although speeding continued to be an issue throughout construction. For each documented record of speeding, SCE addressed the issue with each offender directly and continued to include a discussion of the speed limits during morning tailboards.


*Figure 13. Additional signage along the CRS access road reminding drivers to drive slowly.*

## 3.4 Non-Compliance Events during Colorado River Substation Construction

No PMs or NCRs were issued for CRS construction. Vehicle speeding was an on-going issue reported by the SCE monitors through SCE's FRED system. Each recorded observation detailed how the monitor resolved the issue in the field. Other issues recorded by the monitors at CRS included work starting without the presence of a biological monitor, damage to exclusionary fencing, hydraulic fluid spills and leaks, minor non-compliances with SWPPP conditions, fugitive dust, uncovered excavations, and trash. These issues were documented in SCE's Weekly Reports to the CPUC EMs. Any repeated issues and resolutions observed by the CPUC EMs were discussed with SCE's Environmental Coordinator for substation construction.

## 3.5 Variance Requests for Colorado River Substation Construction

Appendix 6 presents the three CPUC and five BLM Variance Requests submitted and approved for CRS construction. For BLM requests, each was analyzed for approval as a variance request or a Determination of NEPA Adequacy (DNA), as required. Three of the BLM requests were approved as DNAs.

## 3.6 Final Inspection & Restoration of Colorado River Substation

Final inspection of CRS was conducted in 2014 with no issues noted by the CPUC EM. As reported by SCE in December 2014, restoration of the CRS Borrow Area, main access road and substation temporary disturbance areas, and laydown yard is expected to begin in January 2015.

# 4. Red Bluff Substation

## 4.1 Description of Red Bluff Substation

*Figure 14. Installation of transformer panels within the Red Bluff Substation*

The Red Bluff Substation was constructed to facilitate the interconnection of the Desert Sunlight Solar Farm and other renewable generation projects to SCE's DPV1 and DPV2 transmission lines. The substation is located near Chuckwalla and Corn Springs Road adjacent to Interstate 10 (I-10) on approximately 76 acres, most of which is BLM Land and within Critical Desert Tortoise Habitat. Construction of the substation was analyzed as part of the Desert Sunlight Solar Farm Project but was constructed in conjunction with DPV2 and overseen by the BLM and CPUC as part of the project.

Construction of the 500/220 kV substation included installation of two stormwater retention basins, one Spill Prevention Control and Countermeasures (SPCC) pond, a 9-acre material laydown/storage area, a Test and Maintenance building, switchracks (220 and 500 kV), transformers, busses, circuit breakers, a shunt line reactor bank, disconnects and switches to loop-in the DPV1 and DPV2 transmission lines (see Figure 14). In addition to the substation site, the main access road from Corn Springs Road was improved for approximately 5 miles to 24 feet wide with a 2-foot shoulder on each side. The road has 93 stormwater crossings, eight of which have more channelized flow and are outfitted with pipe or box culverts.

## 4.2 Construction Activities at Red Bluff Substation

Construction activities at the substation began with the installation of Desert Tortoise fencing along the perimeter of the site and drilling of a deep-water well for construction and long-term operation. Once the well was operational, clearing and grading operations commenced. Construction activities within the substation site included grading, foundation and trench excavations, drainage control channels and berms, grounding of infrastructure including grounding wells, rock surfacing, pavement and the construction of an 8 foot high perimeter concrete wall. Two loop-in towers were constructed within the Red Bluff Substation site in order to connect the existing DPV1 and DPV2 towers to the substation switchracks. Once the DPV1 and DPV2 loop-in towers were complete, conductor was strung from the transmission line to the racks inside the substation. The substation was energized on June 6, 2013.

During construction activities at Red Bluff, one unanticipated archaeological discovery occurred. SCE's archeological monitors created an ESA and followed the proper protocols per the HPMP.

## 4.3 Access Road Paving Environmental Assessment

In addition to the substation construction, SCE improved an existing unpaved Southern California Gas Company gas line patrol road to provide access to the Red Bluff Substation. The road was straightened and graveled in April 2012. SCE's initial plan was to pave the road, which was not described in detail in the FEIR. In October 2012, SCE submitted a Project Modification Report for Red Bluff Substation Access Road Surfacing that requested permission to pave the road with asphaltic concrete. The BLM prepared an Environmental Assessment (EA) to address the surfacing of the Red Bluff Substation access road and an Adaptive Management Strategy to reduce sensitive species mortality. On January 9, 2014 the BLM issued a Decision Record on the EA. In this decision, the BLM approved concrete Arizona crossings (fords through washes) with gravel surfacing elsewhere on the road. SCE must also install speed limit signs, at least two speed control devices per mile, a locked gate and fence, and traffic counters that will be owned, operated, and maintained by the BLM. Construction on this access road began in July 2014 and continued through December 2014. As reported by SCE in December 2014, the Red Bluff Substation crews will finish all Arizona wet crossings on the south side of the access road by the end of the year (2014). Construction of the north side wet crossings will start in 2015. Installation of additional BLM requested features such as the gate at the entrance of Gas Line road and the speed bumps will also be installed in 2015. Construction is anticipated to be completed in mid-May 2015. The CPUC monitored this activity through December 2014 to ensure compliance with all mitigation measures and conditions of the EA.

## 4.4 Non-Compliance Events during Red Bluff Substation Construction

No PMs or NCRs were issued for construction activities at the Red Bluff Substation. Throughout construction activities, SCE's biological and general monitors reported issues in FRED that included repairs to exclusionary fences or temporary BMPs, hydraulic fluid spills or leaks, construction activities occurring prior to biological sweeps, fugitive dust, speeding, and trash. Each reported incident was handled directly by the monitors or sent to SCE's Environmental Management. To resolve the number of speeding incidents along the road, SCE implemented vehicle escorts for all trucks coming into and out of the substation (see Figure 15).

*Figure 15. A procession of haul trucks escorted to maintain speed limits along the access road to and from Red Bluff Substation.*

## 4.5 Variance Requests for Red Bluff Substation Construction

Appendix 7 presents the two CPUC and eight BLM Variance Requests submitted and approved for Red Bluff Substation construction. Requests included an access road realignment, rock crushing screening, and additional water sources.

## 4.6 Final Inspection of Red Bluff Substation

As reported by SCE in December 2014, they will assess Red Bluff Substation and access road temporary impact areas after construction has been completed to determine the need for seeding. Seeding for the Red Bluff Substation and access road will occur in fall/winter of 2015.

# 5. Devers Substation

## 5.1 Description of Devers Substation

To accommodate the DPV2 transmission line, an expansion of the existing substation pad of approximately 3 acres of permanent and temporary disturbance areas in Modeled Desert Tortoise Habitat was required. Upgrades to the existing infrastructure included extending existing 500 kV operating buses, and installing two new dead-end structures, circuit breakers, and disconnect switches to terminate the new line. In addition, a portion of the interior paved road to the existing helipad site was re-routed from the southwest corner of the expansion area to the northeast corner of the expansion area, to provide access to the relocated helipad site. The NTP for the start of construction was approved on May 9, 2012.

## 5.2 Construction Activities at Devers Substation

Construction at the Devers Substation began on June 14, 2012, with grading and filling of the expansion site. Once the expansion area was complete, crews fenced the exterior and built the new infrastructure to occupy the expansion area. Underground fiber optic cable was installed from tower 2000A to the Devers Substation 500 kV MEER building. The new access road was paved through the expansion area to the new helipad site (see Figure 16). A telecom conduit was installed from existing DPV1 transmission line tower M0-T1, located south of the expansion area, and terminated at an existing telecom duct bank within the substation. Once most of the interior work was complete, transmission line conductor was strung from the new DPV2 towers to the 500 kV buses that had been extended. In addition to the 500 kV work, the Devers 220 kV circuit breakers were upgraded in the southern portion of the existing substation footprint. Upgrades to the substation were energized in September 2013.

*Figure 16. Paving activities within the expansion area at the Devers Substation.*

## 5.3 Non-Compliance Events During Devers Substation Construction

No PMs or NCRs were issued for Devers Substation construction. Compliance issues recorded in FRED by SCE's monitors during construction at the Devers Substation included hydraulic fluid spills and leaks and minor non-compliances with the SWPPP. There was one instance where a manhole was left uncovered overnight. The biological monitor inspected the hole, found no entrapped wildlife, and discussed the issue with the crew the next day.

## 5.4 Variance Requests for Devers Substation Construction

Appendix 8 presents the two CPUC Variance Requests submitted and approved for Devers Substation construction. The requests were for the use of additional existing access roads to access telecom activities and to eliminate construction visual screening in the expansion area.

## 5.5 Final Inspection of Devers Substation

Final inspection of the Devers Substation was completed in October 2013 with no issues noted by the CPUC EM.

*Figure 17. Assembly of circuit breakers and disconnect switches at the Valley Substation.*

# 6. Valley Substation

## 6.1 Description of Valley Substation

Upgrades to the Valley Substation were completed to accommodate the construction and operation of the DPV2 transmission line. The upgrades included the installation of new circuit breakers and disconnect switches on approximately 2 acres in the western portion of the existing substation. The NTP for the start of construction was approved on June 20, 2012.

## 6.2 Construction Activities at Valley Substation

Construction activities at the Valley Substation began on July 19, 2012, and included clearing of existing gravel, grading, foundation installation, and assembly of the new circuit breakers and disconnect switches (see Figure 17). Construction activities at the substation were completed on September 9, 2013.

## 6.3 Non-Compliance Events during Valley Substation Construction

No PMs or NCRs were issued for Valley Substation construction. Only one instance of a crew beginning construction activities without a monitor present was reported by SCE's monitors in the FRED system. The issue was resolved with the crew the same day.

## 6.4 Variance Requests for Valley Substation Construction

No variances to construction of the Valley Substation were requested.

## 6.5 Final Inspection of Valley Substation

Final inspection of the Valley Substation was completed in October 2013 with no issues noted by the CPUC EM.

# 7. Other Construction Activities

## 7.1 Capacitor Bank

*Figure 18. Fencing installation at Series Capacitor site.*

The Series Capacitor Bank is approximately 2 acres located adjacent to the existing DPV1 Series Capacitor Bank between DPV2 Structures 2443 and 2443ALT within Critical Desert Tortoise Habitat. Construction activities at the site began on May 18, 2012, and included installation of fencing and visual screening, installation and maintenance of BMPs, and installation of 100 feet of underground conduit with one manhole, series capacitors, disconnect switches, telecommunications equipment, lighting, grounding grid, paving, and dead end structures located on either side of the series capacitor banks (See Figure 18). In addition, a temporary 1-acre fenced material laydown area was required for storage and material staging at the site. The Series Capacitor was approved under a BLM NTP on September 19, 2011, and was energized on May 16, 2014. Seven BLM variance requests were submitted and approved (see Appendix 9). The majority of the requests were for additional workspaces and activities. No PMs or NCRs were issued for construction and SCE monitors reported only hydraulic fluid spills and leaks, work occurring prior to biological sweeps, and minor SWPPP non-compliances in FRED. Each issue was discussed with the crew directly at the time the incident occurred.

## 7.2 Telecommunications Facilities

### 7.2.1 CRS-Blythe Southeast Telecom

The CRS–Blythe Southeast Telecom Line is a telecommunications link between CRS and SCE's Blythe Service Center in Blythe, California. The line extends from CRS as Optical Ground Wire (OPGW) for about 5.5 miles along the new and existing towers to Tower M123-T1, where the OPGW transitions underground. This section of OPGW replaces the existing overhead ground wire on the DPV1 line (see Figure 19). From Tower M123-T1, the line extends in underground conduit for approximately 50 feet, to the south side of the DPV1 right-of-way, then transitions to an overhead fiber optic line (All-Dielectric Self-Supporting or ADSS line) installed on new wood poles east for approximately 3,600 feet to the agricultural area of the Palo Verde Valley. The line travels northward from here in new underground conduit, transitions to ADSS installed on new wood poles to 14th Street in the City of Blythe along existing overhead structures, and finally turns into the Blythe Service Center via an approximately 250-foot section of new underground conduit. Portions of this line lie within Occupied Desert Tortoise Habitat. The NTP was approved on November 15, 2012. Construction activities began on December 12, 2012, and were completed by

*Figure 19. Overhead ground wire pulling operations along the Southeast Telecomm Line.*

February 21, 2013. There were two CPUC and one BLM Variance Requests submitted and approved (see Appendix 9). Two of the requests were for additional access roads and one was for additional work-space. No PMs or NCRs were issued for construction of the CRS–Blythe Southeast Telecom Line.

### 7.2.2 Desert Center Telecom

The new Desert Center Telecommunication Site is located on the north side of Airport Access Road, approximately 600 feet east of State Route 177 (Rice Road), and west of the former Desert Center Airport. The site consists of a 12-foot-by-36-foot communications room and associated equipment, a 185-foot tower with microwave equipment, and two 10-foot-diameter antennas (see Figure 20). This scope of work was approved under the Red Bluff Substation BLM NTP on September 19, 2011. Construction activities began in November 2012 and were completed by May 2013. There were two BLM Variance Requests submitted and approved for temporary extra workspace (see Appendix 9). One instance of a crew removing gravel from the site without the presence of a biological monitor was recorded by SCE's biological monitors.

*Figure 20. Erection of the telecom tower at the Desert Center site.*

### 7.2.3 Chuckwalla Telecom

The limited construction within the existing Chuckwalla Mountain Telecommunication Site consisted of the addition of one 80-foot microwave tower, two 10-foot-diameter microwave antennas, and the relocation of five antennas to increase the reliability of the microwave system intertie between existing SCE facilities and to provide primary and backup telecommunications services for the new 500 kV transmission loop-in lines. This scope of work was approved under the Red Bluff Substation BLM NTP on September 19, 2011. Construction activities began in November 2012 and were completed in May 2013. One incident was recorded by an SCE biological monitor of the construction crew travelling to the site in the dark without a biological monitor in an area known for the presence of desert tortoises. No variances were requested for the Chuckwalla telecom work.

## 7.3 Distribution Lines

### 7.3.1 CRS 33 kV Distribution Line

The CRS 33 kV distribution line consisted of an extension of an existing distribution line to provide power to CRS, a northern telecommunications line installed along the extension, and access road improvements, all of which was approved under the CRS NTP. The distribution line extension occurred from an existing 33 kV line located north of the CRS site. Construction activities included installing approximately 50 wood poles and 12,000 circuit feet of 33 kV wire, and creating 11 drive-and-crush pull sites. Equipment and vehicles used to install the wood poles and power cable used drive and crush methods during the installation. This consisted of crushing vegetation with vehicles rather than removing it, in order that seed and vegetative matter would remain on-site to support regeneration. The vehicles and equipment generally followed a path to the east or south of the pole locations or through existing disturbed areas to avoid encountering unidentified cultural resources.

Construction activities for the northern telecommunication line included approximately 10 miles of All-Dielectric Self-Supporting (ADSS) cable that was installed on the distribution line extension poles and on existing poles to the east to Buck Substation. In addition to the distribution line work, 2,400 feet of underground conduit on Buck Boulevard was installed between Buck Substation and Hobson Way. Construction activities for the distribution line and northern telecommunications line began in October 2011 and were completed in December 2011. One Project Memorandum was issued on October 28, 2011, for construction vehicles leaving the marked disturbance limits at two locations (see Figure 21).

### 7.3.2 Red Bluff 12 kV Distribution Line

The Red Bluff 12 kV Distribution line work included an upgrade of SCE's existing Desert Center 12 kV circuit distribution line to provide power to the Red Bluff Substation. This resulted in approximately 500 square feet of permanent disturbance in Critical Desert Tortoise Habitat. Approximately 2,600 linear feet of the existing 12 kV circuit overhead distribution line, located on non-BLM land along the south frontage of I-10, was upgraded to convert the circuit from single-phase to three-phase. This upgrade required the removal and replacement of eight wood poles in disturbed land adjacent to a paved SCE franchise road (see Figure 22). Four additional new wood poles, approximately 40 feet high, were installed in the same property. Following the installation of the poles, wire was strung from pull sites located at the east and west ends of the segment. The NTP for construction was approved on October 11, 2011. Construction activities began in November 2011 and were completed in December 2011. There was one instance reported by an SCE archaeological monitor expressing to the distribution line contractor that dragging wire during the removal process could easily damage any archaeological materials in the area. The monitor suggested simply cutting the old wire in those areas to avoid impacts to cultural ESAs; this technique was implemented. No variances were requested for Red Bluff 12 kV distribution line work.

*Figure 21. Vehicle tracks outside of disturbance limits along the CRS 33 kV distribution line access route.*

*Figure 22. Replacement of old poles with new wooden poles along Aztec Road for the Red Bluff distribution line.*

## 7.4 Mirage Substation Loop-Ins

The Mirage Substation loop-in improvements consisted of the installation of new fiber optic cables to provide routing of telecommunications for the new 500 kV transmission line. OPGW for the Devers Substation to Series Capacitor Bank transmission line segment transitions to ground level at DPV2 Tower 2130. From here OPGW, the telecommunications line was constructed as underground conduit for approximately 1,500 feet through Modeled FTHL and Critical CVFTL Habitat, to the south side of the DPV1 right-of-way, where it transitioned to overhead and extended on existing wood poles along

the west side of Vista De Oro, before connecting via additional underground conduit to existing switchracks inside of the Mirage Substation and communications room. The line also was connected from Tower 2130 to the new OPGW on Devers-Mirage 220 kV towers (constructed under the separate Devers-Mirage Project) via underground conduit. The NTP for the start of construction was approved on December 3, 2012. Construction activities began on January 31, 2013, and concluded on April 29, 2013. One Variance Request was submitted to CPUC and was approved for temporary extra workspace. No PMs or NCRs were issued for the Mirage Substation loop-in construction, although the CPUC EMs and SCE biological monitors did observe the contractor working outside the approved disturbance three times, including placing materials (vault shields) outside the disturbance area boundaries (see Figure 23). The CPUC EM notified the SCE Environmental Coordinator that further violations would result in a Project Memorandum being issued. No further violations were observed by the CPUC EMs. No variances were requested for the loop-in work.

*Figure 23. Vault shield placed outside the disturbance area limits at the Mirage Substation Loop-ins project site.*

# 8. Post-Construction Requirements

The following tasks remain for the completion of the DPV2 Transmission Line Project:

- As reported by SCE in December 2014, the final construction of the access road to the Red Bluff Substation is scheduled for completion in May 2015. Restoration of the Substation and access road temporary disturbance areas will begin in Fall 2015.
- As reported by SCE in December 2014, that remaining restoration and revegetation of the 500 kV transmission line is scheduled to begin in January 2015.

# 9. Lessons Learned

The intent of this section is to identify the shortcomings of mitigation and permit requirements approved for the DPV2 Transmission Line Project and present lesson learned that may be applicable to future projects.

**Final Engineering and Construction.** Subsequent to project approval, SCE conducted detailed engineering for the approved DPV2 alignment. As is common to transmission projects, some project components were modified, including construction yards, helicopter landing zones, and the addition of FAA requirements. Many of these modifications were handled in the Project Modification Report, which was submitted and approved prior to the start of construction.

Included in the final engineering by SCE was the location of sites required for conductor pulling operations, namely, pull sites, wire setup sites, splice sites, and guard structure sites. Final engineering was not reviewed by SCE's contractor prior to approval by the agencies. Once the contractor moved into wire stringing activities on the project, almost all of the approved sites required some modifications. This resulted in 31 CPUC and 18 BLM variance requests submitted and approved for modification to sites needed for pulling operations alone. An additional 12 TEWS requests were reviewed and approved by the CPUC EMs for modifications to pull sites located in previously disturbed locations. For each Variance

or TEWS request, the utility spent time and resources in defining in the field and on maps the new disturbance area boundaries, and on biologists surveying the sites and completing biological survey reports. Once the requests were submitted, CPUC and BLM representatives then reviewed the information provided and field validated each site to ensure the changes were properly identified in the field.

***LESSON LEARNED*:** While it is understood that the utility should not expend ratepayer funds on final engineering for a project that has not yet been approved; the utility should be prepared early in the planning phase to facilitate the identification of project changes related to constructability. This can be accomplished by engaging a contractor or individual with extensive knowledge of construction needs for this type of project. The CPUC should encourage the utility to bring such a person onto the project early in the process to prevent extensive amounts of variance requests during construction.

**Helicopter Landing Zones.** There were 9 temporary HLZs located within and adjacent to the ROW. A number of helicopter construction support yards on the DPV2 project were found to be of insufficient size, some being less than 2 acres. This resulted in transmission tower sections being assembled at some tower sites and then being transported by helicopter to their final location. Furthermore, the insufficient size of helicopter yard H2 was a primary reason for the SCAQMD violation pertaining to dust generation by the Air Crane. Because SCE was not allowed to conduct dust suppression outside the H2 boundary, air crane rotor downwash extended beyond the approved disturbance area and created the fugitive dust issue.

***LESSON LEARNED:*** While still in the planning stages, the utility should be encouraged to adequately identify HLZs relative to the type and intensity of helicopter construction planned. Adequate space should be allowed for helicopter operations and any required material storage, assembly of towers, or other activities likely to be conducted. Consideration for mitigation measure compliance, such as preventing fugitive dust, should also be considered in the sizing and construction of the HLZ to prevent violations.

**Flying External Loads Over Energized Lines.** During construction of the Sunrise Powerlink Project, flying of helicopter external loads over energized high voltage transmission lines (greater than 230 kilovolt) was prohibited by the utility. For the Sunrise Project, this was confirmed through monitor coordination with San Diego Gas and Electric (SDG&E) and the Federal Aviation Administration (FAA) San Diego Flight Safety Division Office (FSDO).

When external load over-flights of the energized DPV1 line were observed, monitors advised SCE and PAR of this previous understanding. PAR then added a cautionary note to the daily helicopter schedule stating that eternal load over-flights of DPV1 were prohibited. When additional external load over-flights of DPV1 were both observed and required for DPV2 construction, monitors inquired with the FAA Riverside FSDO as to compliance of these over-flights with Federal Aviation Regulations (FAR) Part 133 requirements. FAA Riverside FSDO determined that such external load operations were not considered inconsistent with FAR Part 133, and all safety considerations for such operations were between the helicopter operator and owner of the transmission line. Initially, SCE stated that it needed to have a helicopter pick area at a location on an access road so as to not have to fly over energized lines; later, SCE determined that it was allowed for helicopter to fly loads over the energized lines.

***LESSON LEARNED:*** When planning helicopter operations adjacent to energized lines, the utility should coordinate with the FAA and the construction contractor, prior to construction, to ensure all activities are consistent with safety and flight regulations. It should be explicit as to whether and under what conditions external loads would be allowed to be carried over energized high-voltage lines. A mitigation measure focusing on helicopter construction and FAA regulation compliance should require the utility to prepare a Helicopter Construction Plan addressing helicopter operations on the project.

**Permanent Yards.** In the DPV2 Final EIR/EIS and subsequent PMR, the construction yards identified for use during construction were analyzed as temporary facilities. When the construction yards were being decommissioned, SCE identified five yards where the landowner requested that the improvements made to the sites be left in place. A sixth yard, Devers Yard, also was requested by SCE to be kept as a permanent yard for on-going and future SCE projects. Variance request #85 was approved by the CPUC for the five yards. Devers Yard was under debate for some time due to its location in Modeled Desert Tortoise Habitat, but was subsequently approved as a modification to Variance Request #85.

> ***LESSON LEARNED:*** Retaining construction yards as permanent facilities, or honoring landowner requests that site improvements (such as fencing, gates, and rock paving) be left in place subsequent to the completion of project construction are potential utility requests as construction winds down. This was demonstrated by the DPV2 Project and previous approvals made for the Sunrise Powerlink Project. Therefore, the CEQA/NEPA analysis of major infrastructure facilities should consider that a percentage of construction yards will remain as permanent facilities, or that improvements will be retained by landowners. The utility should attempt to identify facilities or improvements likely to be made permanent so that provisions are made for mitigating adverse impacts of these permanent changes, as appropriate.

**Mitigation Obstacle #1 – Nesting Birds.** Mitigation Measure B-5a required establishment of 500-foot buffers for state and federally listed bird species and 300-foot buffer for raptors and all other species of nesting birds. In the measure it states that the buffer will be evaluated after consultation with the CPUC/BLM/CDFW/USFWS. In 2012, this consultation occurred with CDFW. In 2013, when CDFW would no longer review buffer reduction requests, this role fell to CPUC. An enormous amount of time on part of utility, the CPUC, and their consultants went into reviewing and approving the overall process for buffer reduction requests, but then into each individual buffer reduction request.

> ***LESSON LEARNED:*** A Nesting Bird Monitoring and Management Plan or another type of mitigation implementation process needs to be in place before the nesting season begins (and preparation of such a document should be a requirement of a mitigation measure for protecting nesting birds). The plan or process should be prepared by the utility and should address all types and intensities of construction from project initiation to end — addressing adequate buffers, nest survey protocols, and nest removals. The plan or process should be submitted and approved by lead agencies prior to the start of construction. Because resource agencies (CDFW and USFWS) are reluctant to issues approvals of such plans or specific actions or requests, this appears to fall to the lead agencies. Having such a plan or process in place prior to construction should reduce the number of buffer reduction requests needed and would put all parties involved on the same page from the onset of the nesting season. The result would save time and money while simultaneously protecting nesting birds and meeting mitigation requirements.

**Mitigation Obstacle #2 – Habitat Restoration Timing.** Mitigation Measure B-1a required SCE to restore all temporary areas disturbed by project construction, including temporary disturbance areas around tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations that are used during construction of the Proposed Project. The HRCP was initially required to be reviewed and approved by the CPUC and BLM prior to the start of construction. SCE was allowed to start construction activities while drafts of the HRCP were reviewed. A final draft was submitted to CPUC and BLM and approved in December 2012. In August 2013, SCE indicated to the CPUC consultant that restoration would not immediately follow the completion of construction, as anticipated, but would occur in Fall 2014. The CPUC and the BLM jointly sent a letter the SCE stating this timeline was not consistent with measures that were adopted as conditions of project approval or with the HRCP, and requested SCE

provide information as to why restoration would be delayed for over one year. In response, SCE stated that due to the scale, complexity, and duration of the restoration work, and with portions of the project still under active construction, additional time was needed to plan and hire a qualified restoration contractor while the full extent of reseeding was still being ascertained by the project team. SCE also stated the timing provided an opportunity to monitor the natural recruitment of native vegetation on sites subject to lower levels of disturbance to identify the appropriate seeding effort.

***LESSON LEARNED:*** A Habitat Restoration Plan needs to be reviewed and approved prior to the start of construction. The mitigation measure requiring restoration of temporary disturbance areas should clearly state the requirement for such a plan and include a timeline for when seed collection, nursery stock acquisition, and restoration activities should be conducted. Ideally, restoration activities should begin in the Fall that immediately follows completion of construction activities. The utility's approach on DPV2 of monitoring the natural recruitment of native vegetation leaves disturbed lands vulnerable to invasive weeds and to nutrient leaching during rain events, prolonging the risk of site erosion by wind/water, and needlessly lengthens the period of both biological and visual impacts.

## Appendix 1. Required Compliance Plans for the DPV2 Transmission Line Project

| MM/APM | Required Plan | Applicable Project Component | Approval Date |
|---|---|---|---|
| **Air Quality** | | | |
| MM AQ-1a | Fugitive Dust Emission Control Plan | Transmission Line | 4/18/2011 |
| AM AIR-6 | Fugitive Dust Emission Control Plan | Red Bluff Substation Only | 7/18/2011 |
| **Biological Resources** | | | |
| MM B-1a | Habitat Restoration/Compensation Plan | Transmission Line | 12/3/2012 |
| AM BIO-1 | Habitat Compensation Plan | Red Bluff Substation Only | 2/2/2012 |
| | Compensatory Mitigation Lands – Wildlands Formal Acquisition Proposal | Entire Project | 3/30/2012 |
| MM B-2a; 2b | Noxious Weed Control Plan | Transmission Line | 9/11/2011 |
| AM BIO-2 | Integrated Weed Management Plan | Red Bluff Substation Only | 11/3/2011 |
| AM BIO-4, MM-BIO-3 | Red Bluff Bio Worker Environmental Awareness Program | Red Bluff Substation Only | 9/9/2011 |
| MM B-5a | Breeding and Nesting Birds Management Strategy | Entire Project | N/A |
| AM BIO-5 | Vegetation Salvage Plan | Red Bluff Substation Only | 10/18/2011 |
| AM BIO-5 | Restoration Plan | Red Bluff Substation Only | 4/11/2012 |
| AM BIO-5 | Desert Dry Wash Woodland Monitoring and Reporting Plan | Red Bluff Substation Only | 11/3/2011 |
| MM B-6a | Transplant Plan | Transmission Line Only | 9/11/2011 |
| MM B-8a | Special Status Plant Impact Avoidance and Minimization Plan | Transmission Line Only | 3/13/2012 |
| MM B-8a | Coachella Valley Milk Vetch Avoidance Plan | Transmission Line Only | 1/4/2012 |
| MM B-8b | Special Status Plant Avoidance Plan | Transmission Line Only | 11/14/2011 |
| MM B-9c | Worker Environmental Awareness Program | Transmission Line Only | 2/16/2012 |
| MM WIL-1 | American Badger and Desert Kit Fox Protection Plan | Red Bluff Substation Only | 10/17/2011 |
| MM WIL-1 | Desert Tortoise Translocation Plan | Red Bluff Substation Only | 9/13/2011 |
| MM WIL-2 | Raven Management Plan | Red Bluff Substation Only | 6/8/2012 |
| MM WIL-3 | Avian and Bat Protection Plan | Red Bluff Substation Only | 11/29/2011 |
| **Cultural and Paleontological Resources** | | | |
| MM C-1a | Class III Cultural Resources Inventory Summary | Entire Project | N/A |
| MM C-1b | Historic Properties Management Plan | Entire Project | N/A |
| MM C-1f MM C-4e | Worker Environmental Awareness Program | Entire Project | 2/16/2012 |
| MM C-4a | Paleontological Resources Inventory Review | Entire Project | 4/6/2011 |
| C-4b | Paleontological Monitoring and Treatment Plan | Entire Project | 4/6/2011 |
| | HPMP Plan for Discovery of Cultural Resources for the preparation of the material construction yards | Transmission Line | 7/20/2011 |
| **Geology, Mineral Resources and Soils** | | | |
| MM G-1a | Desert Pavement Plan | Transmission Line Only | 3/8/2012 |
| **Hydrology and Water Resources** | | | |
| H-1a | Hydrology Plan (in conjunction with HRCP) | Transmission Line Only | 2/20/2013 |
| MM (SEIR) H-7a, H-7b, H-7c | Water Supply Plan | CRS Only | 11/2/2011 |

## Appendix 1. Required Compliance Plans for the DPV2 Transmission Line Project

| MM/APM | Required Plan | Applicable Project Component | Approval Date |
|---|---|---|---|
| **Land Use** | | | |
| MM L-1a | Construction Notification Plan | Entire Project | 4/18/2011 |
| **Public Health and Safety** | | | |
| MM P-1a | Hazardous Substance Control and Emergency Response Plan | Transmission Line Only | 6/9/2011 |
| MM P-1b | Environmental Training and Monitoring Program | Transmission Line Only | 5/23/2011 |
| MM P-1b | Worker Environmental Awareness Program | Entire Project | 2/16/2012 |
| AM HAZ-2 | MEC Research, Investigation, Response Plan/Worker Training | Red Bluff Substation Only | 7/21/2011 |
| AM HAZ-6a | Red Flag Warning Program Field Guide | Red Bluff Substation Only | 8/25/2011 |
| AM HAZ-6c/8 | Hazardous Material, Waste Handling and Emergency Response | Red Bluff Substation Only | 8/1/2011 |
| AM HAZ-6c | Spill Prevention Control and Counter Measure Plan | Red Bluff Substation Only | 1/28/2013 |
| AM HAZ-9 | Fire Prevention Plan | Red Bluff Substation Only | 7/20/2011 |
| FEIS 2.5 | Worker Environmental Awareness Program | Red Bluff Substation Only | 10/5/2011 |
| MM P-4a (and RB AM HAZ-6c) | Spill Prevention Control and Countermeasure Plan | CRS Only | 1/28/2013 |
| **Visual** | | | |
| MM V-1a | Construction Screening Plan | Transmission Line Only | 4/7/2011 |
| MM V-1b | Construction Lighting Mitigation Plan | Transmission Line Only | 4/21/2011 |
| MM V-6a | Visual Analysis Report (in conjunction with HRCP) | Transmission Line Only | 2/20/2013 |
| MM V-6a | Surface Treatment Plan | Transmission Line Only | 6/23/2011 |
| MM V-6c | Lighting Mitigation Plan | Transmission Line Only | 12/4/2012 |
| MM VR-4 | Construction Lighting Plan | Red Bluff Substation Only | 8/1/2011 |
| MM VR-4 | Permanent Lighting Plan | Red Bluff Substation Only | 1/29/2013 |
| **Wilderness and Recreation** | | | |
| MM WR-1a WR-1b | Construction Notification Plan (under Land Use) | Red Bluff Substation Only | 4/18/2011 |

## Appendix 2. Required Permits for the DPV2 Transmission Line Project

| Agency | Permit Name | Applicable Project Components |
|---|---|---|
| **Lead Agencies** | | |
| CPUC | Certificate of Public Convenience and Necessity | Entire Project |
| BLM | Amendment to Right-of-Way Grant | Entire Project |
| **Federal Agencies** | | |
| United States Department of Agriculture Forest Service | Revised Easement | Crossing San Bernardino National Forest lands in Devers to Valley Segment |
| USFWS | Right-of-Way Grant | Crossing Coachella Valley National Wildlife Refuge in Devers to Red Bluff Segment |
| USFWS | Consultation for Section 7 of Endangered Species Act | Entire Project |
| USFWS | Habitat Conservation Plan | Entire Project |
| U.S. Army Corps of Engineers | Clean Water Act Section 404 Permit – fill to waters of the U.S. | Entire Project |
| Federal Aviation Administration | Form 7480 Notice of Proposed Landing Area | Devers to Red Bluff; Devers to Valley |
| Federal Aviation Administration | Form 7460(1) Permit and Notice to Airmen | Devers Substation; Mirage |
| Agua Caliente Indian reservation | Resolution of land acquisition issues by consultations between Agua Caliente Tribe and SCE, or eminent domain proceedings | Devers to Red Bluff |
| **State Agencies** | | |
| State Lands Commission | Right-of-Way Easement | Entire Project |
| California Department of Fish and Wildlife | 1602 Streambed Alteration Agreement | Entire Project |
| Regional Water Quality Control Board, Region 7 (Colorado River) | Storm Water Construction General Permit 2009-0009-DWD (SWPPP) (R7) | Entire Project |
| Regional Water Quality Control Board, Region 8 (Santa Ana River) | Storm Water Construction General Permit 2010-0033-DWD (SWPPP) (R8) | Entire Project |
| State Water Resources Control Board | Clean Water Act Section 401 Permit – Water Quality Certificate | Entire Project |
| California Department of Transportation, District 8 | Overload Permits/ Highway Encroachment Permits | Entire Project |
| California Department of Toxic Substances Control | EPA Hazardous Waste Generator ID | Entire Project |
| California State Historic Preservation Office | Cultural Resources Use Permit, Field Use Authorization, or an Archaeological Resources Protection Act (ARPA) Permit (if required), Consultation for Section 106 of the National Historic Preservation Act | Entire Project |
| California Air Resources Board | Portable Engine Registration for specified non-mobile portable engines | Entire Project |

## Appendix 2. Required Permits for the DPV2 Transmission Line Project

| Agency | Permit Name | Applicable Project Components |
|---|---|---|
| **Local Agencies** | | |
| Riverside County | Road/Highway Encroachment/Crossing Permit/Review, Flood Control/Drainage Channel Encroachment/Crossing Permit/Review | Entire Project |
| Mojave Desert Air Quality Management District | Air Quality Permit for the Colorado River Switchyard | CRS Only |
| South Coast Air Quality | Fugitive Dust Control Plan, air quality permits for portable engines greater than 50 hp not registered under the CARB Portable Engine Registration Program | entire Project |
| Caochella Valley Water District | Utility Clearance and Encroachment Permit | Devers to Red Bluff |
| Cities of Banning, Beaumont, Palm Springs, Desert Hot Springs, Cathedral City, Blythe | Applicable Local Permits | Entire Project |
| Southern California Gas Pipeline | Encroachment/Crossing Permit | Entire Project |
| BNSF Railroad | Encroachment/Crossing Permit | Entire Project |
| Metropolitan Water District | Line crossing permit for crossing the Julian Hinds–Mirage 220 kV transmission line and the Colorado River Aqueduct crossing | Devers to Red Bluff |

## Appendix 3. NTPs Approved for the DPV2 Transmission Line Project

| NTP # / Permit | Date Requested | Date Issued | Project Component | Description |
|---|---|---|---|---|
| NTP #1 | 4/28/2011 | 6/23/2011 | 500 kV transmission line | Authorization to proceed with the development of the Devers, Desert Center 1, Desert Center 2, Summit, Blythe, Perris, Beaumont, and Menifee Construction Yards. |
| NTP #2 | 8/5/2011 | 9/9/2011 | 500 kV transmission line | Installation of exclusionary fencing, Devers to Blythe. |
| NTP #3 | 8/26/2011 | 9/19/2011 | 500 kV transmission line | Construction of Beaumont #2 Construction Yard. |
| NTP #4 | 9/9/2011 | 9/20/2011 | 500 kV transmission line | Construction of Indio Construction Yard. |
| NTP #7 | 9/9/2011 | 12/1/2011 | 500 kV transmission line | Authorization to proceed with construction activities associated with a minor relocation of the Devers-Valley No. 1 Line. |
| NTP #8 | 10/8/2011 | 12/2/2011 | 500 kV transmission line | Authorization to proceed with construction of the DPV2 transmission line between Red Bluff and Colorado River Substations and replacement of existing DPV1 overhead ground wire. |
| NTP #9 | 10/8/2011 | 12/2/2011 | 500 kV transmission line | Authorization to proceed with construction of the DPV2 transmission line between the existing Devers Substation and the new Red Bluff Substation. |
| NTP #10 | 10/8/2011 | 12/2/2011 | 500 kV transmission line | Authorization to proceed with construction of the DPV2 transmission line between existing Devers and Valley Substations. |
| NTP #11 | 11/8/2011 | 12/10/2011 | 500 kV transmission line | Authorization to proceed with construction of Devers 2 and Indio 2 Construction Yards. |
| NTP #12 | 1/20/2012 | 2/3/2012 | 500 kV transmission line | Authorization to proceed with construction of the Desert Center 3 Construction Yard. |
| — | 6/19/2012 | Retracted | 500 kV transmission line | H10- Helicopter Landing Zone |
| NTP #6 | 9/16/2011 | 10/17/2011 | Colorado River Substation | Authorization to proceed with the new Colorado River Substation on private lands, including extension of the existing 33 kV distribution line, installation of a new telecommunication line, and access road improvements. |
| NTP #13 | 4/12/2012 | 5/9/2012 | Devers Substation | Authorization to proceed with upgrades to the Devers Substation. |
| NTP #5 | 9/16/2011 | 10/11/2011 | Other construction activities | Upgrades to a segment of the existing SCE 12 kV circuit overhead distribution line to supply light and power to the Red Bluff Substation. |
| NTP #15 | 7/16/2012 | 11/15/2012 | Other construction activities | Authorization to proceed with construction activities associated with the Colorado River Substation to Blythe South East Telecommunication Route |
| NTP #16 | 11/7/2012 | 12/3/2012 | Other construction activities | Mirage Substation loop-in. |
| NTP #14 | 6/13/2012 | 6/20/2012 | Valley Substation | Authorization to proceed with upgrades to the Valley Substation. |

## Appendix 4. Project Memoranda and Non-Compliance Reports for the DPV2 500 kV Transmission Line

| PM/NCR | Date Issued | Location | Description |
|---|---|---|---|
| PM #2 | 1/18/2012 | Tower 2649/ CR1-2W | DPV2 Construction contractor vehicle driving outside of the approved tower and access road disturbance area limits. |
| PM #3 | 3/8/2012 | Towers 1059 and 1060 | Failure to comply with MM B-5a which requires that 300ft buffers are established around active bird nests. Working within unapproved active nest buffers. |
| PM #4 | 4/4/2012 | Towers 2515, 2520, and 2526 | Impacts to desert pavement at Towers 2520 and 2526 by not implementing one of the approved methods stated in the revised Desert Pavement Plan. Impacts to desert tortoise habitat when a road was built near Tower 2515 that was not approved. |
| PM #5 | 4/18/2012 | Along the main access road near Red Bluff | Excessive fugitive dust observed on multiple locations along the main access road near Red Bluff Substation. Violation of MM AQ-1a and the Fugitive Dust Emission Control Plan. |
| PM #6 | 5/8/2012 | Along the T/L access roads | Construction vehicles observed driving off the approved access road limits at various locations along the T/L. |
| PM #7 | 6/1/2012 | Near Tower 2317 | Two stand tanks were installed in an area that was not approved for the Project along the access road near Tower 2317. |
| PM #8 | 6/1/2012 | Along the access road near Tower 2310 | Road base was installed along a portion of the access road to protect the utility crossing south of Tower 2310. This work was completed prior to the pre-construction verification and release of this road from the CPUC. |
| PM #9 | 6/19/2012 | Tower 2126 | Inadequate covering of foundation excavations at Tower 2126. Violation of BO-13. |
| PM #10 | 9/21/2012 | Tower 1037 | Work occurred at Tower 1037 without the Fire Patrol Representative on site, a requirement on the USFS Fire Plan. |
| PM #11 | 12/5/2012 | Tower 1070 | Excessive Fugitive Dust occurring during Helicopter Picks at Tower 1070. Violation of MM AQ-1a and the Fugitive Dust Emission Control Plan. |
| PM #12 | 3/19/2012 | Towers 1001 and 1077 | Construction work occurring prior to biological monitor presence at Towers 1001 and 1077. |
| PM #13 | 3/21/2012 | Various Locations along the T/L | Helicopter construction operations occurring within ESA nest buffers. |
| NCR #1 | 1/13/2012 | Project wide | Unapproved removal of stick nests from DPV1 Transmission Line towers. |
| NCR #2 | 5/18/2012 | Tower 2333 | Failure to protect wildlife during construction which resulted in the death of a kit fox. |
| NCR #3 | 6/4/2012 | Near Tower 2310 | Road base was installed at two locations along the access road to protect the utility crossings near Tower 2310. This work was completed prior to the pre-construction verification and release of this road from the CPUC. |
| NCR #4 | 7/2/2012 | Near Tower 2303X | Road base was installed along a portion on a road not approved for the Project. |
| NCR #5 | 7/2/2012 | Near Towers 2204 and 2205 | Project equipment drove outside the approved road width along the access road near Towers 2204 and 2205. These towers are located within the Coachella Valley Preserve. |
| NCR #6 | 7/6/2012 | Near Tower 1083 | Project equipment drove outside the existing road width along the access road near Tower 1083. |
| NCR #7 | 7/12/2012 | Tower 2437 | Inadequate covering of a foundation excavation at Tower 2437. Violation of BO-13. |
| NCR #8 | 7/23/2012 | Near Tower 2604 | Project equipment drove outside the approved road limits along Chuckwalla road west of Tower 2604. |
| NCR #9 | 8/28/2012 | Tower 2644 | Construction work conducted outside the approved project limits. |

## Appendix 4. Project Memoranda and Non-Compliance Reports for the DPV2 500 kV Transmission Line

| PM/NCR | Date Issued | Location | Description |
|---|---|---|---|
| NCR #10 | 9/10/2012 | Towers 1153 and 1155 | Construction work conducted at Towers 1153 and 1155 prior to the CPUC site verification and release to SCE. |
| NCR #11 | 10/18/2012 | Tower 1036 | Excavations at Tower 1036 were left uncovered and no proper means for wildlife to escape entrapment had been installed. Violation of BO-13. |
| NCR #12 | 11/2/2012 | Tower RB2-4E | Work occurred at an unapproved location near RB2-4E. |
| NCR #13 | 1/29/2013 | Access road to Tower 1130 | Violation of the conditions of BLM Variance Approval #6, which stated no road improvement to the existing road could be made. Road improvements were conducted on 01/19/13. |
| NCR #14 | 3/19/2013 | Tower 1078 | Construction work occurring within an ESA buffer near Tower 1078, which is a violation to MM B-5a. |
| NCR #15 | 3/21/2013 | Guard Structure sites near Towers 1001 and 1003 | Construction work occurring outside the approved work area limits at the Guard Structure Sites near Tower 1001 and 1003. |
| NCR #16 | 6/26/2013 | Near Tower 1089 | Construction work occurred in an unapproved area near Tower 1089. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| VR #1 | CPUC | 5/6/2011 | 5/24/2011 | Construction of traditional lattice towers instead of "Tetra" towers at two locations (Structures #1139 and #1140) |
| VR #2 | CPUC | 4/21/2011 | 5/26/2011 | Revisions to Mitigation Measure B-7d pertaining to seasonal restrictions for Coachella Valley fringe-toed lizard and flat-tailed horned lizard to support consistency with conditions provided in the Biological Opinion. |
| VR #11 | CPUC | 9/26/2011 | 9/28/2011 | Two water sources for exclusionary fencing work. |
| VR #12 | CPUC | 10/13/2011 | 10/18/2011 | Request for parking/temporary staging of vehicles along existing access road within the Coachella Valley Preserve during exclusionary fencing activities. |
| VR #19 | CPUC | 1/6/2012 | 1/18/2012 | Request to allow the usage of helicopter landing zone H9-DV as a replacement for H8-DV. |
| VR #20 | CPUC | 1/13/2012 | 1/19/2012 | Request for the use of offsite water hydrants located in the Cabazon area for dust suppression. |
| VR#21 | CPUC | 1/20/2012 | 2/2/2012 | Request for the use of offsite water hydrants located in the Lake Tamarisk area for dust suppression. |
| VR #21 Mod | CPUC | 3/16/2012 | 3/21/2012 | Modification to VR #21. Request installation of two driveways and an underground water line adjacent to the approved stand tank locations at the Lake Tamarisk Resort water source. |
| VR #21 MOD | CPUC | 9/24/2012 | 10/3/2012 | Request for a modification to Variance #21 for the expansion of the egress at the Lake Tamarisk water source. |
| VR #22 | CPUC | 1/25/2012 | 2/2/2012 | Request to install 10,000-gallon standing water tanks at three locations. |
| VR #23 | CPUC | 1/27/2012 | 2/21/2012 | Request to modify NTP #10 and MM AQ-1g for additional transmission line helicopter construction. |
| VR #24 | CPUC | 2/8/2012 | 2/21/2012 | Request for approval to purchase MWD water credits in lieu of Colorado River water credits due to the unavailability of water allotments within the Colorado River Basin. |
| VR #25 | CPUC | 2/10/2012 | 2/28/2012 | Request for use of existing DPV1 access roads and spur/stub roads for parking and staging of vehicles and equipment. |
| VR #27 | CPUC | 3/9/2012 | 3/20/2012 | Request for minor disturbance area shifts for 55 Temporary Disturbance Areas. |
| VR #28 | CPUC | 3/22/2012 | 3/30/2012 | Request to utilize Gas Line Road for DPV2 construction access. |
| VR #29 | CPUC | 3/22/2012 | 4/4/2012 | Request for relocation of DPV1 Minor Relocation outage pull sites. |
| VR #31 | CPUC | 4/24/2012 | 5/5/2012 | Request for a revision to HLZ-H2 disturbance area. |
| VR #32 | CPUC | 3/16/2012 | 5/8/2012 | Request for HLZ-H7 boundary modification. |
| VR #33 | CPUC | 4/26/2012 | 5/17/2012 | Request for additional water hydrant locations for transmission line construction activities. |
| VR #36 | CPUC | 5/17/2012 | 5/29/2012 | Request for three additional water stand tanks from Devers to Red Bluff transmission line. |
| VR #37 | CPUC | 6/20/2012 | 6/30/2012 | Request for a disturbance area shift for Tower 1013 due to engineering changes. |
| VR #38 | CPUC | 8/9/2012 Revised | 8/21/2012 | Request for additional water source locations in the Thousand Palms area. |
| VR #39 | CPUC | 8/14/2012 | 9/5/2012 | Request for additional access road use near Towers 2103, 2112, and 2260. |
| VR #40 | CPUC | 8/22/2012 | 9/11/2012 | Request for the use of an existing spur road to Tower 2242. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| VR #41 | CPUC | 9/10/2012 | 9/12/2012 | Request for the use of additional access routes to Towers 1118-1122 and HLZ-H9. These roads were previously approved through the TEWS process. |
| — | CPUC | 4/12/2012 | Retracted | Preconstruction survey extension request from 14 days to 30 days. Petition for Modification required. |
| — | CPUC | 8/9/2012 Revised | Retracted | APM A-6 – Eliminate tarping on bottom dump trucks. Petition for Modification required. |
| VR #42 | CPUC | 8/14/2012 | 9/21/2012 | Request for a road to be used as a helicopter picking site near Tower 1031. |
| VR #42 MOD | CPUC | 2/28/2013 | 3/5/2013 | Request to modify Variance 42 to allow equipment and material to be staged on the access road near Tower 1031 for helicopter picks. |
| — | CPUC | 8/14/2012 | Retracted | Request that Helicopter Landing Zones (HLZs) on Devers–Valley be exempt from construction screening MM V-1a. |
| VR #43 | CPUC | 9/18/2012 (Revised) | 9/21/2012 | Request revisions to pull sites from Devers to Red Bluff transmission line. |
| VR #44 | CPUC | 9/24/2012 | 9/28/2012 | Request a stub road revision at Tower 1147. |
| VR #45 | CPUC | 9/25/2012 | 10/4/2012 | Request for the use of additional access roads on the Devers–Valley transmission line. |
| VR #46 | CPUC | 9/20/2012 | 10/10/2012 | Request for additional helicopter picking locations for Towers 1112 and 1108. |
| VR #47 | CPUC | 10/9/2012 (Revised) | 10/18/2012 | Request for the relocation of guard structures and an addition of an access road in the Devers to Red Bluff transmission line. |
| VR #48 | CPUC | 10/2/2012 | 10/18/2012 | Request for an additional water source in the Devers–Valley transmission line. |
| VR #49 | CPUC | 11/2/2012 | 11/7/2012 | Request additional disturbance area at Tower 2000X. |
| VR #50 | CPUC | 10/19/2012 | 11/11/2012 | Request for the expansion of splice site 57 (near Tower 2557) and expansion and shift of splice site 64 (near Tower 2614). |
| VR # 51 | CPUC | 10/24/2012 | 11/15/2012 | Request to convert two conventional tower sites to helicopter sites from Devers to Red Bluff. In addition, SCE is requesting to add temporary helicopter platforms to access three sites. |
| VR #52 | CPUC | 11/13/2012 (Revised) | 11/15/2012 | Request to revise the disturbance area for Fiber Optic Site 59. |
| VR #54 | CPUC | 11/27/2012 | 12/7/2012 | Request to revise pull site on Devers–Valley (pull Package 1). |
| VR #55 | CPUC | 11/28/2012 | 12/10/2012 | Request to revise pull sites from Devers to Red Buff (Pull Site Revision III-B). |
| VR #56 | CPUC | 12/17/2012 | 1/7/2013 | Request for an additional HLZ site near Tower 1051. |
| VR#57 | CPUC | 1/3/2013 and 1/7/2013 | 1/10/2013 | Request to shift guard structures from Red Bluff to Devers (Priority #1). Request to shift guard structures from Red Bluff to Devers (Minor Modification). |
| VR #58 | CPUC | 1/4/2013 | 1/15/2013 | Request to shift pull sites from Red Bluff to Devers (Pull Site Priority #2). |
| VR #62 | CPUC | 1/30/2013 | 2/7/2013 | Request to shift Devers–Valley Pull 102 for Towers 1002-1010. |
| VR #63 | CPUC | 1/30/2013 | 2/7/2013 | Request to shift Devers–Valley Pulls 103 for Towers 1010-1019. |
| VR #64 | CPUC | 1/29/2013 | 2/12/2013 | Request to shift Devers–Valley Pulls 104-105 for Towers 1019-1031. |
| VR #65 | CPUC | 1/31/2013 | 2/12/2013 | Request to shift Devers–Valley Pulls 101 for Towers 1000-1002. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| VR #65 MOD | CPUC | 3/22/2013 | 3/25/2013 | Request to modify Guard Structure Sites GS3 and GS4 previously approved in Variance #65. |
| VR #66 | CPUC | 2/14/2013 Revised on 2/25/2013 | 2/28/2013 | Request to expand Tower 1077 disturbance area. |
| VR #67 | CPUC | 2/25/2013 | 2/28/2013 | Suppress fugitive dust outside of HLZs H2 and H2A disturbance areas, including required access roads. |
| VR #68 | CPUC | 2/13/2013 | 3/7/2013 | Request to shift Devers–Valley Pulls 109 for Towers 1083-1090. |
| VR #69 | CPUC | 3/7/2013 | 3/8/2013 | Request to use Gasline Road for construction access to Tower 2249 to avoid an active nest. |
| VR #69 MOD | CPUC | 3/26/2013 | 4/1/2013 | Request to modify Variance #69 by adding an access road between the Gasline Road and the ROW road near Tower 2249. |
| VR #71 | CPUC | 3/8/2013 | 3/14/2013 | Request to modify the turning radius at HLZ H7. |
| VR #72 | CPUC | 3/13/2013 | 3/18/2013 | Request to shift Devers–Valley Pulls 115 for Towers 1132 to 1143. |
| VR #73 | CPUC | 3/13/2013 | 3/24/2013 | Request to shift Devers–Valley Pulls 110-113 for Towers 1090 to 1122. |
| VR #74 | CPUC | 3/22/2013 | 3/29/2013 | Request to shift Devers–Valley Pulls 116-117 for Towers 1143-1157. |
| VR #75 | CPUC | 3/22/2013 | 4/1/2013 | Request to shift Devers–Valley Pulls 107-108 for Towers 1065 thru 1082. |
| VR #76 | CPUC | 3/28/2013 | 4/4/2013 | Request to increase Wire Site 42 near Tower 1122. |
| VR #77 | CPUC | 4/4/2004 | 4/10/2013 | Request to modify Guard Structure Sites GS22A and GS22B on Devers–Valley. |
| VR #78 | CPUC | 4/5/2013 | 4/10/2013 | Request to relocate the approved access road to DV Fiber Option Optional Setup 34 to within SCE's right-of-way along the Devers–Valley segment. |
| VR #79 | CPUC | 4/11/2012 | 4/16/2013 | Request to use an alternate access route to Power Line Road at Diablo Road to maintain access between Towers 1003 and 1004 along the Devers–Valley segment. |
| VR #80 | CPUC | 4/16/2013 | 4/18/2013 | Request for disturbance area adjustments at GS52A and GS52B on the Devers–Valley segment. |
| VR #81 | CPUC | 4/23/2013 | 4/29/2013 | Request for disturbance area adjustments at GS89A and GS89B on the Devers–Valley segment. |
| VR #82 | CPUC | 4/23/2013 | 5/2/2013 | Request to use walking paths from Towers 1031 to 1032, 1034 to 1037 and 1048 to 1051 on the Devers–Valley segment. |
| VR #83 | CPUC | 5/2/2013 | 5/8/2013 | Modification of the temporary disturbance areas for Guard Structures DV-GS92, DV-GS97 and DV-GS100A, Devers–Valley segment. |
| VR #84 | CPUC | 5/8/2013 | 5/14/2013 | Request to expand HLZ H2A to support the installation of the permanent helicopter platforms on the north side of the DPV1 line. |
| VR #86 | CPUC | 5/29/2013 | 5/30/2013 | Request authorization to use the existing southbound turnout off Highway 79. |
| VR #87 | CPUC | 6/6/2013 | 6/6/2013 | Request to extend guard structure site 54 near Tower 1084. |
| VR #88 | CPUC | 6/11/2013 | 6/12/2013 | Request to shift guard structure site 54 (approved in VR #87) due to an active bird nest. |
| VR #89 | CPUC | 6/14/2013 | 6/19/2013 | Request to expand guard structure site 89B near Tower 1147. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| VR #90 | CPUC | 6/14/2013 | 6/20/2013 | Request to modify guard structure sites 56 and 57 near Valley Substation. |
| VR # 91 | CPUC | 7/11/2013 | 7/17/2013 | Request access roads to Guard Structure sites DV-GS76B, DV-GS77, and DV-GS80. |
| VR #92 | CPUC | 7/15/2013 | 7/17/2013 | Request to use an access road by Tower 1137 for fiber reel site 38Alt on Pull 15. |
| USFS-1 | CPUC | 3/15/2012 | 3/20/2012 | SBNF engineering modifications (revised disturbance areas). |
| VR #17 | CPUC | 1/4/2012 | 1/9/2012 | Request to utilize existing approved construction yard and/or exclusionary fencing water sources for transmission line construction needs. |
| VR #3 | CPUC | 7/12/2011 | 7/18/2011 | Request to utilize offsite well location and the installation of a 12,000-gallon water tank for filling trucks. |
| VR #4 | CPUC | 7/6/2011 | 7/21/2011 | Request for the expansion of the Menifee Construction Yard for material storage and other activities. |
| VR #6 | CPUC | 7/7/2011 | 8/1/2011 | Request to remove Mitigation Measures B-13a and B-13b, and to modify B-1a, B-1a (revised), and B-7e pertaining to Western Riverside County MSHCP compliance. |
| VR #7 | CPUC | 8/11/2011 | 8/22/2011 | Request to utilize offsite water hydrants at Perris, Beaumont, Menifee, and Blythe Construction Yards. |
| VR #8 | CPUC | 8/26/2011 | 8/27/2011 | Request to install seeded jute netting along the property frontage at Beaumont Construction Yard. |
| VR #9 | CPUC | 8/24/2011 | 9/1/2011 | Request for installation of temporary power poles outside of Desert Center 2 Construction Yard. |
| VR #10 | CPUC | 8/26/2011 | 9/1/2011 | Request to utilize offsite water locations needed for dust suppression at Devers and Summit Construction Yards. |
| — | CPUC | 9/21/2011 | Retracted | Request for additional workspace involving vegetation clearing, installation of BMPs, and temporary driveway installation at Perris Construction Yard. |
| VR #13 | CPUC | 10/26/2011 | 11/10/2011 | Request for temporary power supply to provide power to construction trailer at the Devers #1 Construction Yard. |
| VR #15 | CPUC | 12/13/2011 | 12/14/2011 | Request for temporary power outside yard boundaries required to power office trailers. |
| VR #15 MOD | CPUC | 4/25/2012 | 5/2/2012 | Request for temporary power modification. |
| VR #85 | CPUC | 3/11/2013 Revised on 5/14/2013 | 5/15/2013 | Request for the following yards (Beaumont 1, Perris, Devers, Indio 1, and Desert Center 2) to stay as permanent construction yards. **The revised request is for the Beaumont 1, Perris, Indio 1, Desert Center 1 and Desert Center 2 yards to stay as permanent construction yards.** |
| VR #85 MOD | CPUC | 3/11/2013 | 8/21/2013 | Request to continue to use the Devers Yard for remaining SCE Projects and leave improvements in place. |
| DNA #4 | BLM | 2/1/2012 | 5/24/2012 | Request for the addition of proposed helicopter construction and maintenance platforms to the description included in the Project Refinements 1 and 2 documents. |
| DNA #5 | BLM | 3/5/2012 | 5/22/2012 | Request to revise road locations. |
| DNA #8 | BLM | 5/2/2012 | 7/31/2012 | Request for an additional access route between Towers 2528X and 2527. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| DNA #11 | BLM | 7/2/2012 | 7/31/2012 | Request for a disturbance area shift at Tower 1013 due to engineering changes. This tower is located on BLM land. |
| DNA #14 | BLM | 10/1/2013 | 10/29/2013 | Request for an irregular disturbance area near Tower 2526 to remove a transposition tower and conduct associated wire stringing activities. |
| Level 1 #2 | BLM | 7/12/2012 | 8/6/2012 | Request for two stand tank locations. Received revised request from SCE on 08/06/12. |
| Level 1 #3 | BLM | 9/13/2012 | Partial Approval on 09/17/12, Complete Approval on 09/24/12 | Request to remove visual screening at Helicopter Landing Zones H1E H4 and H5. *Approved the removal of screening at H4 on 09/17/12. Approval of the removal of screening at H1E and H5 on 09/24/12. |
| Level 1 #4 | BLM | 9/14/2012 | 9/17/2012 | Request to shift the tower disturbance area at Tower 2644. |
| Level 1 #5 | BLM | 9/14/2012 | 9/19/2012 | Request to use an existing road (Ford Dry Lake Road) as construction access. |
| Level 1 #6 | BLM | 9/25/2012 | 9/26/2012 | Request the use of an additional access route to Tower 1130. |
| Level 1 #7 | BLM | 10/9/2012 | 10/11/2012 | Request to use an access road (Chuckwalla Valley road) near Tower 2574. |
| Level 1 #13 | BLM | 3/7/2013 | 3/8/2013 | Request to use Gasline Road to Tower 2249 to avoid an active nest. |
| Level 1 #14 | BLM | 4/23/2013 | 4/30/2013 | Request to use walking paths from Towers 1031 to 1035 on the Devers–Valley segment |
| Level 1 #15 | BLM | 4/30/2013 | 5/2/2013 | Request to use a drive and crush road to access the Red Bluff Telecommunication manhole. |
| Level 1 #16 | BLM | 5/17/2013 | 5/20/2013 | Request for pull site revisions at the Red Bluff Substation. |
| Level 1 #17 | BLM | 5/21/2013 | 5/23/2013 | Request for security guard at the Red Bluff Substation. |
| Level 2A #1 | BLM | 9/20/2012 | 9/24/2012 | Request for pull site revisions from Devers to Red Bluff. |
| Level 2A #2 | BLM | 10/4/2012 | 10/5/2012 | Request for an access road to RB14 pull site near Red Bluff. |
| Level 2A #3 | BLM | 10/4/2012 | 10/25/2012 | Request for additional disturbance area for pull sites and an access road near Red Bluff RB2-5E. Revised on 10/11/12 and 10/22/12. |
| Level 2A #4 | BLM | 10/5/2012 | 10/10/2012 | Request to relocate two guard structures near Red Bluff Substation. |
| Level 2A #5 | BLM | 10/10/2012 | 10/10/2012 | Request for additional disturbance area at Tower RB1-2W in order to build the tower prior to the scheduled outage. |
| Level 2A #6 | BLM | 10/19/2012 | 10/25/2012 | Request for temporary disturbance area shifts at wire sites, splice sites, pull sites, guard structures and access roads from CRS to RB. |
| Level 2A #7 | BLM | 10/19/2012 | 10/25/2012 | Request for temporary disturbance area shifts at splice site 53 (near Tower 2535) and access road to Wire Site 69/Pull Site 70/54 (near Tower 2540). |
| Level 2A #8 | BLM | 10/30/2012 | Awaiting revised request from SCE | Request additional disturbance area at Guard Sites GS05 and GS05A. |
| Level 2A #9 | BLM | 11/14/2012 | 11/16/2012 | Request to shift Fiber Optic Site 63. |
| Level 2A #10 | BLM | 11/9/2012 | 11/16/2012 | Request for the shift of Wire Site No 73/Pull Site No 74/Splice Site No 58, Wire Site No 81/Pull Site No 82/Splice Site No 65, and Wire Site No 83/Pull Site No 84/Splice Site. |

## Appendix 5. Variance Requests for the 500 kV Transmission Line

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| Level 2A #11 | BLM | 11/14/2012 | 11/16/2012 | Request for the shift Splice Site 55, Access Rd to Splice Site No. 55, Guard Structures 126 and 127, and Pull Sites 71 and 72. |
| Level 2A #12 | BLM | 11/19/2012 | 11/28/2012 | Request to widen Guard Structures CRD-GS132, CRD-GS133, CRD-GS137, CRD-GS138, and CRD-GS138A (Pull Site 78, Wire Site 77). |
| Level 2A #13 | BLM | 11/28/2012 | 12/5/2012 | Request to revise pull sites from Devers to Red Bluff (Pull Site Revision III-A). |
| Level 2A #14 | BLM | 12/5/2012 | 12/11/2012 | Request to expand Splice Site 40. |
| Level 2A #15 | BLM | 1/7/2013 | 1/10/2013 | Request to shift guard structures from Red Bluff to Devers (Minor Modification). |
| Level 2A #16 | BLM | 1/31/2013 | 2/13/2013 | Request to shift Devers–Valley Pulls 103 for Towers 1014-1016. |
| BLM #4 | BLM | 3/16/2012 | 3/30/2012 | Red Bluff Loop-in pull site modifications. |
| BLM #5 | BLM | 3/22/2012 | 5/18/2012 | Request to use Gas Line Road for DPV2 construction access. |
| BLM #6 | BLM | 3/23/2012 | 4/10/2012 | Request to revise CRS pull sites. |
| BLM #7 | BLM | 3/28/2012 | 4/11/2012 | Request for HLZ (helicopter landing zone) at Red Bluff Loop-in Tower site RB1-2W. |
| — | BLM | 7/24/2012 | Retracted | Request to modify APM A-6 to eliminate tarping on bottom dump trucks. |
| BLM #9 | BLM | 4/4/2012 | 9/21/2012 | Request for a HLZ and temporary disturbance area shifts near CRS. |
| BLM #10 | BLM | 10/24/2012 | 11/20/2012 | Request to construct Tower 2413 using both conventional and helicopter construction methods. |

## Appendix 6. Variance Requests for the Colorado River Substation

| Variance Request | Agency | Date Requested | Date Issued | Description |
|---|---|---|---|---|
| VR #14 | CPUC | 11/10/2011 | 11/28/2011 | Request for increased well pumping to support civil work, including access road improvements, at CRS. |
| VR #30 | CPUC | 3/23/2012 | 4/10/2012 | Request to revise CRS pull sites. |
| VR #53 | CPUC | 10/30/2012 | 11/20/2012 | Request for access road improvements along the CRS access road. |
| DNA #9 | BLM | 5/19/2012 | 6/15/2012 | Request for a permanent turning radius along the CRS access road. |
| DNA #10 | BLM | 6/4/2012 | 6/15/2012 | Request for a 300-foot driveway along the CRS access road. |
| DNA #13 | BLM | 7/30/2012 | 9/26/2012 | DNA for CRS Telecommunication Distribution Line. |
| BLM #1 | BLM | 10/18/2011 | 10/27/2011 | Request to install a temporary guard structure along the entrance of the existing transmission line access road for CRS. |
| BLM #2 | BLM | 10/19/2011 | 10/27/2011 | Request to approve 24-hour drilling operations at the CRS site. |

## Appendix 7. Variance Requests for the Red Bluff Substation

| Variance Request | Date Requested | Date Issued | Description |
|---|---|---|---|
| BLM #3 | 1/24/2012 | 2/28/2012 | Rock Crushing |
| BLM #4 | 3/16/2012 | 3/30/2012 | Red Bluff Loop-in pull site modifications. |
| BLM #7 | 3/28/2012 | 4/11/2012 | Request for HLZ (helicopter landing zone) at Red Bluff Loop-in Tower site RB1-2W. |
| BLM #8 | 4/6/2012 | 5/16/2012 | Additional water sources @ Red Cloud Road, Red Bluff Substation. |
| DNA #2 | 12/21/2011 | 2/1/2012 | Request to install secondary well at Red Bluff Substation site. |
| DNA #5 | 3/5/2012 | 5/22/2012 | Request to revise road locations. |
| DNA #6 | 4/4/2012 | 4/17/2012 | Red Bluff Substation access road realignment. |
| DNA #12 | 6/18/2012 | 9/25/2012 | Request to build a telecom site near Desert Center for Red Bluff Substation. |

## Appendix 8. Variance Requests for the Devers Substation

| Variance Request | Agency | Date Requested | Date Issued | Project Component | Description |
|---|---|---|---|---|---|
| VR #35 | CPUC | 5/11/2012 | 5/15/2012 | Devers Substation | Request to eliminate construction screening of the Devers Substation Expansion area. |
| VR #70 | CPUC | 3/5/2013 | 3/13/2013 | Devers Substation | Request to use access roads by the Devers Substation. |

## Appendix 9. Variance Requests for Other Construction Activities on the DPV2 Transmission Line Project

| Variance Request | Agency | Date Requested | Date Issued | Project Component | Description |
|---|---|---|---|---|---|
| VR #60 | CPUC | 1/18/2013 | 1/22/2013 | SE Telecom | Request for an additional disturbance area for CRS SE Telecom Route Anchor Rod Installation. |
| VR #61 | CPUC | 1/18/2013 | 1/23/2013 | SE Telecom | Request to use Gravel Pit Road to access pole installation locations east of transmission line tower M123-T1 for the SE Telecom Route. |
| Level 1 #9 | BLM | 1/18/2013 | 2/4/2013 | SE Telecom | Request to use Gravel Pit Road to access pole installation locations east of transmission line tower M123-T1 for the SE Telecom Route. |
| Level 1 #10 | BLM | 2/7/2013 | 2/8/2013 | Desert Center Telecom | Request for a temporary work space for the Red Bluff Desert Center Telecom. |
| Level 2A #17 | BLM | 4/1/2013 | 4/3/2013 | Desert Center Telecom | Request a work area for the Red Bluff Desert Center Telecom Manhole. |
| DNA #1 | BLM | 10/27/2011 | 12/7/2011 | Series Capacitor | Request for a slight expansion of the Series Capacitor site due to engineering conflicts. |
| DNA #3 | BLM | 12/22/2011 | 5/24/2012 | Series Capacitor | Request to relocate a portion of the Imperial Irrigation District distribution line located at the Series Capacitor site. |
| DNA #7 | BLM | 4/12/2012 | 5/22/2012 | Series Capacitor | Request for certain activities to be constructed within the footprint of the Series Capacitor bank. |
| Level 1 #11 | BLM | 2/20/2013 | 2/22/2013 | Series Capacitor | Request for a temporary work area at the Series Capacitor Site. |
| Level 1 #12 | BLM | 2/28/2013 | 3/4/2013 | Series Capacitor | Request for two additional temporary work areas at the Series Capacitor Site for an underground conduit. |
| Level 1 #19 | BLM | 9/19/2013 | 9/20/2013 | Series Capacitor | Additional material/equipment staging and storage area at the Series Capacitor. |
| Level 1 #20 | BLM | 10/18/2013 | 10/23/2013 | Series Capacitor | Request for use of an existing driveway to complete connections to the Series Capacitor No. 1. |
| VR #5 | CPUC | 4/22/2011 | 7/28/2011 | Substations | Request for a modification of APM A-7 regarding carpooling for construction at substations. |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Devers to Valley Segment** | | | | | | | | | | | | | | |
| 1000X | Private | | X | | | | | | | | | | | |
| 1001 | Private | | X | | | | | | | | | | | |
| 1002 | Private | | X | | | | | | | | | | | |
| 1003 | Private | | X | | | | | | | | | | | |
| 1004 | Private | | X | | | | | | | | | | | |
| 1005 | Private | | X | | | | | | | | | | | |
| 1006 | Private | X | X | | | | | | | | | | | |
| 1007 | Private | | X | | | | | | | | | | | |
| 1008 | Private | | X | | | | | | | | | | | |
| 1009 | Private | | X | | | | | | | | | | | |
| 1010 | Private | | X | | | | | | | | | | | |
| 1011 | Private | | X | | | | X | | | | | | | |
| 1012 | Private | | X | | | | | | | | | | | |
| 1013 | BLM | | X | | | | | | | | | | | |
| 1014 | BLM | | X | | | | X | | | | | | | |
| 1015 | BLM | | X | | | | | | | | | | | |
| 1016 | Private | | X | | | | X | | | | | | | |
| 1017 | Private | X | X | | | | | | | | | | | |
| 1018 | Private | X | X | | | | X | | | | | | | |
| 1019 | Private | X | X | | | | X | | | | | | | |
| 1020 | Private | | X | | | | X | | | | | | | |
| 1021 | Private | | X | | | | X | | | | | | | |
| 1022 | Private | X | X | | | | X | | | | | | | |
| 1023 | Private | X | X | | | | X | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1024 | Private | | X | | | | X | | | | | | | |
| 1025 | Private | X | X | | | | X | | | | | | | |
| 1026 | Private | | X | | | | X | X | | | | | | |
| 1027 | Private | | X | | | | X | X | | | | | | |
| 1028 | Private/BLM | | X | | | | X | | | | | | | |
| 1029 | Private/BLM | | X | | | | X | | | | | | | |
| 1030 | Private | | X | | | | X | | | | | | | |
| 1031 | Private | | X | | | | X | | | | | | | |
| 1032 | BLM | | X | | | | | | | | | | | |
| 1033 | BLM | | X | | | | | | | | | | | |
| 1034 | BLM | | X | | | | | | | | | | | |
| 1035 | Private | | X | | | | | | | | | | | |
| 1036 | Private | | X | | | | | | | | | | | |
| 1037 | SBNF | | X | | | | | | | | | | | |
| 1038 | SBNF | | | | | | | | | | | | | |
| 1039 | SBNF | | | | | | | | | | | | | |
| 1040 | SBNF | | | | | | | | | | | | | |
| 1041 | SBNF | | | | | | | | | | | | | |
| 1042 | SBNF | | | | | | | | | | | | | |
| 1043 | SBNF | | | | | | | | | | | | | |
| 1044 | SBNF | | | | | | | | | | | | | |
| 1045 | SBNF | | | | | | | | | | | | | |
| 1046 | SBNF | | | | | | | | | | | | | |
| 1047 | SBNF | | | | | | | | | | | | | |
| 1048 | SBNF | | | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1049 | Private | | | | | | | | | | | | | |
| 1050 | Private | | | | | | | | | | | | | |
| 1051 | Private | | X | | | | | | | | | | | |
| 1052 | Private | | X | | | | X | | | | | | | |
| 1053 | Private | | X | | | | | | | | | | | |
| 1054 | Private | X | X | | | | | | | | | | | |
| 1055 | Private | X | X | | | | | | | | | | | |
| 1056 | Private | X | X | | | | X | | | | | | | |
| 1057 | Private | | | | | | | | | | | | | |
| 1058 | Private | | | | | | | | | | | | | |
| 1059 | Private | | | | | | | | | | | | | |
| 1060 | Private | | | | | | | | | | | | | |
| 1061/R1 | Private | X | | | | | | | | | | | | |
| 1062/R2 | Private | | | | | | | | | | | | | |
| 1063/R3 | Private | | X | | | | X | | | | | | | |
| 1064/R4 | Private | | X | | | | | | | | | | | |
| M15-T1 | Private | | X | | | | | | | | | | | |
| M15-T2 | Private | | X | | | | | | | | | | | |
| M15-T3 | Private | | X | | | | | | | | | | | |
| 1065 | Private | | X | | | | | | | | | | | |
| 1066 | Private | | X | | | | | | | | | | | |
| 1067 | Private | X | | | | | | | | | | | | |
| 1068 | Private | | | | | | | | | | | | | |
| 1069 | Private | | | | | | | | | | | | | |
| 1070 | Private | X | | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1071 | Private | | | | | | | | | | | | | |
| 1072 | Private | | | | | | | | | | | | | |
| 1073 | Private | | | | | | | | | | | | | |
| 1074 | Private | X | | | | | | | | | | | | |
| 1075 | Private | X | | | | | | | | | | | | |
| 1076 | Private | | | | | | | | | | | | | |
| 1077 | Private | X | | | | | | | | | | | | |
| 1078 | Private | X | | | | | | | | | | | | |
| 1079 | Private | X | | | | | | | | | | | | |
| 1080 | Private | X | | | | | | | | | | | | |
| 1081 | Private | X | | | | | | | | | | | | |
| 1082 | Private | X | | | | | | | | | | | | |
| 1083 | Private | X | | | | | | | | | | | | |
| 1084 | Private | X | | | | | | | | | | | | |
| 1085 | Private | | | | | | | | | | | | | |
| 1086 | Private | | | | | | | | | | | | | |
| 1087 | Private | | | | | | | | | | | | | |
| 1088 | Private | | | | | | | | | | | | | |
| 1089 | Private | | | | | | | | | | | | | |
| 1090 | Private | | | | | | | | | | | | | |
| 1091 | BLM | | | | | | | | | | | | | |
| 1092 | BLM | | | | | | | | | | | | | |
| 1093 | BLM | | | | | | | | | | | | | |
| 1094 | Private | X | | | | | | | | | | | | |
| 1095 | Private | | | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1096 | Private | | | | | | | | | | | | | |
| 1097 | Private | | | | | | | | | | | | | |
| 1098 | Private | | | | | | | | | | | | | |
| 1099 | Private | X | | | | | | | | | | | | |
| 1100 | Private | | | | | | | | | | | | X | |
| 1101 | Private | X | | | | | | | | | | | | |
| 1102 | Private | X | | | | | | | | | | | | |
| 1103 | Private | | | | | | | | | | | | | |
| 1104 | Private | | | | | | | | | | | | | |
| 1105 | Private | X | | | | | | | | | | | | |
| 1106 | Private | | | | | | | | | | | | | |
| 1107 | Private | | | | | | | | | | | | | |
| 1108 | Private | | | | | | | | | | | | | |
| 1109 | Private | | | | | | | | | | | | | X |
| 1110 | Private | | | | | | | | | | | | | X |
| 1111 | Private | X | | | | | | | | | | | | X |
| 1112 | Private | | | | | | | | | | | | | X |
| 1113 | Private | | | | | | | | | | | | | X |
| 1114 | Private | | | | | | | | | | | | X | X |
| 1115 | Private | | | | | | | | | | | | | |
| 1116 | Private | | | | | | | | | | | | | |
| 1117 | Private | | | | | | | | | | | | | |
| 1118 | Private | | | | | | | | | | | | | |
| 1119 | Private | | | | | | | | | | | | | |
| 1120 | Private | | | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1121 | Private | | | | | | | | | | | | | |
| 1122 | Private | | | | | | | | | | | | | |
| 1123 | Private | X | | | | | | | | | | | | |
| 1124 | Private | X | | | | | | | | | | | | |
| 1125 | Private | | | | | | | | | | | | | |
| 1126 | Private | | | | | | | | | | | | | |
| 1127 | Private | | | | | | | | | | | | | |
| 1128 | Private | | | | | | | | | | | | | |
| 1129 | BLM | | | | | | | | | | | | | |
| 1130 | BLM | | | | | | | | | | | | | |
| 1131 | Private/BLM | | | | | | | | | | | | | X |
| 1132 | Private | | | | | | | | | | | | | X |
| 1133 | Private | | | | | | | | | | | | X | X |
| 1134 | Private | | | | | | | | | | | | | |
| 1135 | Private | | | | | | | | | | | | | |
| 1136 | Private | | | | | | | | | | | | | |
| 1137 | Private | | | | | | | | | | | | | X |
| 1138 | Private | X | | | | | | | | | | | | |
| 1139 | Private | | | | | | | | | | | | | |
| 1140 | Private | | | | | | | | | | | | | |
| 1141 | Private | X | | | | | | | | | | | | |
| 1142 | Private | | | | | | | | | | | | | |
| 1143 | Private | | | | | | | | | | | | | |
| 1144 | Private | | | | | | | | | | | | | |
| 1145 | Private | | | | | | | | | | | | | X |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1146 | Private | | | | | | | | | | | | | |
| 1147 | Private | X | | | | | | | | | | | | |
| 1148 | Private | X | | | | | | | | | | | | |
| 1149 | Private | | | | | | | | | | | | | |
| 1150 | Private | | | | | | | | | | | | | |
| 1151 | Private | | | | | | | | | | | | | |
| 1152 | Private | | | | | | | | | | | | | |
| 1153 | Private | | | | | | | | | | | | | |
| 1154 | Private | | | | | | | | | | | | | |
| 1155 | Private | X | | | | | | | | | | | | |
| 1156 | Private | | | | | | | | | | | | | |
| 1157 | Private | | | | | | | | | | | | | |
| **Devers to Red Bluff Segment** | | | | | | | | | | | | | | |
| 2000A | Private | | X | | | | | | | | | | | |
| 2000B | Private | | X | | | | | | | | | | | |
| 2000X | Private | | X | | | | X | | | | | | | |
| 2001 | Private | X | X | | | | | | | | | | | |
| 2002 | Private | X | X | | | | | | | | | | | |
| 2003 | Private | | X | | | | | | | | | | | |
| 2004 | Private | | X | | | | | | | | | | | |
| 2005 | Private | X | X | | | | | | | | | | | |
| 2006 | Private | X | X | | | | | | | | | | | |
| 2007 | Private | X | X | | | | | | | | | | | |
| 2008 | Private | | X | | | | | | | | | | | |
| 2009 | Private | | X | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010 | Private | X | | | | | | | | | | | | |
| 2011 | Private | | | | | | | | | | | | | |
| 2012 | Private | | | | | | X | X | | X | | | | |
| 2013 | Private | X | X | | | | X | X | | X | | | | |
| 2015 | Private | X | | | | | X | X | | X | | | | |
| 2016 | Private | X | | | | | X | X | | X | | | | |
| 2017 | Private | | | | | | X | X | | X | | | | |
| 2018 | Private | | | | | | X | X | | X | | | | |
| 2019 | Private | | | | | | X | X | | X | | | | |
| 2020 | Private | X | | | | | X | X | | X | | | | |
| 2100 | Private | X | | | | | X | X | | X | | | | |
| 2101 | Private | X | | | | | X | X | | X | | | | |
| 2102 | Private | | | | | | X | X | | X | | | | |
| 2103 | Private | | | | | | X | | | | | | | |
| 2104 | Private | | | | | | | | | | | | | |
| 2105 | Private | | | | | | X | | | | | | | |
| 2106 | Private | | | | | | X | | | | | | | |
| 2107 | Private | | | | | | X | | | | | | | |
| 2108 | Private | | | | | | X | | | | | | | |
| 2109 | Private | | | | | | X | | | | | | | |
| 2110 | Private | | | | | | X | X | | X | | | | |
| 2112 | Private | X | | | | | X | | | | | | | |
| 2113 | Private | | | | | | X | X | | X | | | | |
| 2114 | Private | | | | | | X | | | | | | | |
| 2115 | Private | | | | | | X | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2116 | Private | | | | | | X | | | | | | | |
| 2117 | Private | | | | | | X | | | | | | | |
| 2118 | Private | | X | | | | X | | | | | | | |
| 2119 | Private | | | | | | X | | | | | | | |
| 2120 | Private | X | | | | | | | | | | | | |
| 2121 | Tribal | | | | | | | | | | | | | |
| 2122 | Private | | | | | | X | | | X | | | | |
| 2123 | Private | X | | | | | | | | | | | | |
| 2124 | Private | X | | | | | | | | | | | | |
| 2125 | Private | | | | | | | | X | | | | | |
| 2126 | Private | | | | | | | | X | | | | | |
| 2127 | Private | | | | | | | | X | | | | | |
| 2128 | Private | | | | | | | | X | | | | | |
| 2129 | Private | | | | | | | | X | | | | | |
| 2130 | Private | | | | | | | | X | | | | | |
| 2131 | Private | X | | | | | | | X | | | | | |
| 2132 | Private | X | | | | | | | X | | | | | |
| 2133 | Private | | | | | | | | X | X | | | | |
| 2134 | Private | | | | | | | | X | X | | | | |
| 2135 | Private | | | | | | | | X | | | | | |
| 2136 | Private | | | | | | | | X | | | | | |
| 2137 | Private | | | | | | | | X | | | | | |
| 2200 | Private | | | | | | | | X | | | | | |
| 2201 | BLM | X | | | | | | | X | | | | | |
| 2202 | BLM | X | | | | | | | X | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2203 | BLM | X | | | | | | | X | | | | | |
| 2204 | Private | | | | | | | | X | | | | | |
| 2205 | Private | X | | | | | | | X | | | | | |
| 2206 | Private | X | | | | | | | X | | | | | |
| 2207 | Private | X | | | | | | | X | | | | | |
| 2208 | Private | X | | | | | | | X | | | | | |
| 2209 | Private | | | | | | | | | | | | | |
| 2210 | Private | | | | | | | | | | | | | |
| 2211 | Private | | | | | | | | | X | | | | |
| 2212 | Private | | | | | | | | | | | | | |
| 2213 | Private | | | | | | | | | | | | | |
| 2214 | Private | | | | | | | | | | | | | |
| 2215 | Private | | | | | | | | | | | | | |
| 2216 | Private | | | | | | | | | | | | | |
| 2217 | Private | X | | | | | | | | | | | | |
| 2218 | Private | X | | | | | | | | | | | | |
| 2219 | Private | | | | | | | | | | | | | |
| 2220 | Private | | | | | | | | | | | | | |
| 2221 | Private | X | | | | | | | | | | | | |
| 2222 | Private | | | | | | | | | | | | | |
| 2223 | Private | | | | | | | | | | | | | |
| 2224 | Private | | | | | | | | | | | | | |
| 2225 | Private | X | | | | | | | | | | | | |
| 2226 | BLM | | | | | | | | | | | | | |
| 2227 | BLM | X | | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2228 | BLM | X | | | | | | | | | | | | |
| 2229 | Private | | | | | | | | | | | | | |
| 2230 | Private | | | | | | | | | | | | | |
| 2230AX | Private | X | | | | | | | | | | | | |
| 2231 | Private | | | | | | | | | | | | | |
| 2232X | Private | X | | | | | | | | | | | | |
| 2233XX | BLM | | | X | | | | | | | | | | |
| 2234X | Private | | | | | | | | | | | | | |
| 2235XX | Private | | | | | | | | | | | | | |
| 2236XX | Private | | | | | | | | | | | | | |
| 2237ALXX | Private | | | | | | | | | | | | | |
| 2238X | Private | X | | | | | | | | | | | | |
| 2239X | Private | X | | | | | | | | | | | | |
| 2240 | Private | X | | | | | X | | | X | | | | |
| 2241 | Private | | | | | | X | | | X | | | | |
| 2242 | Private | | | | | | X | | | X | | | | |
| 2243 | Private | | | | | | X | | | X | | | | |
| 2244 | Private | | | | | | X | | | X | | | | |
| 2245 | Private | | X | | | | | | | | | | | |
| 2246 | Private | X | X | | | | | | | | | | | |
| 2247 | Private | | X | | | | | | | | | | | |
| 2248 | Private | | X | | | | | | | | | | | |
| 2249 | Private | | X | | | | | | | | | | | |
| 2250 | Private | X | X | | | | | | | | | | | |
| 2251 | Private | | X | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2252 | Private | X | X | | | | | | | | | | | |
| 2253 | Private | | X | | | | | | | | | | | |
| 2254 | Private | | X | | | | | | | | | | | |
| 2255 | Private | | X | | | | | | | | | | | |
| 2256 | Private | | X | | | | | | | | | | | |
| 2257 | Private | | X | | | | | | | | | | | |
| 2258X | Private | | X | | | | | | | | | | | |
| 2259 | Private | | X | | | | | | | | | | | |
| 2260 | Private | | X | | | | | | | | | | | |
| 2261X | Private | | X | | | | | | | | | | | |
| 2262ALT | Private | | X | | | | | | | | | | | |
| 2263 | Private | X | X | | | | | | | | | | | |
| 2264 | BLM | | X | | | | | | | | | | | |
| 2265ALTX | Private | | X | | | | | | | | | | | |
| 2266ALTX | Private | | X | | | | | | | | | | | |
| 2267 | Private | | X | | | | | | | | | | | |
| 2268 | BLM | | X | | | | | | | | | | | |
| 2269 | BLM | | X | | | | | | | | | | | |
| 2300X | BLM | | X | | | | | | | | | | | |
| 2301X | BLM | | X | | | | | | | | | | | |
| 2302 | Private | | X | | | | | | | | | | | |
| 2303X | Private | | X | | | | | | | | | | | |
| 2304 | Private | | X | | | | | | | | | | | |
| 2305 | Private | X | X | | | | | | | | | | | |
| 2306 | Private | | X | | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2307 | Private | | X | | | | | | | | | | | |
| 2308 | Private | | X | | | | | | | | | | | |
| 2309 | Private | X | X | | | | | | | | | | | |
| 2310 | BLM | X | X | | | | | | | | | | | |
| 2312 | Private | X | X | | | | | | | | | | | |
| 2313 | BLM | | X | | | | | | | | | | | |
| 2315 | Private | X | X | | | | | | | | | | | |
| 2316 | Private | | X | | | | | | | | | | | |
| 2317 | Private | X | X | | | | | | | | | | | |
| 2318 | Private | X | X | | | | | | | | | | | |
| 2319X | BLM | | | | X | | | | | | | | | |
| 2320 | BLM | | | | X | | | | | | | | | |
| 2321 | BLM | | | | X | | | | | | | | | |
| 2322 | Private | | | | X | | | | | | | | | |
| 2323 | Private | | | | X | | | | | | | | | |
| 2324 | Private | | | | X | | | | | | | | | |
| 2325 | Private | X | | | X | | | | | | | | | |
| 2326A | Private | X | | | X | | | | | | | | | |
| 2327 | Private | | | | X | | | | | | | | | |
| 2328 | Private | | | | X | | | | | | | | | |
| 2329 | Private | | | | X | | | | | | | | | |
| 2330 | Private | | | | X | | | | | | | | | |
| 2331 | Private | | | | X | | | | | | | | | |
| 2332 | Private | | | | X | | | | | | | | | |
| 2333 | Private | | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2334 | Private | | | | X | | | | | | | | | |
| 2335 | Private | | | | X | | | | | | | | | |
| 2336 | BLM | X | | | X | | | | | | | | | |
| 2337 | BLM | | | | X | | | | | | | | | |
| 2338 | BLM | X | | | X | | | | | | | | | |
| 2339 | BLM | X | | | X | | | | | | | | | |
| 2340 | Private | | | | X | | | | | | | | | |
| 2341 | Private | X | | | X | | | | | | | | | |
| 2342 | Private | X | | | X | | | | | | | | | |
| 2343 | Private | X | | | X | | | | | | | | | |
| 2344X | Private | | | | X | | | | | | | | | |
| 2345 | Private | X | | | X | | | | | | | | | |
| 2346 | Private | X | | | X | | | | | | | | | |
| 2347 | Private | | | | X | | | | | | | | | |
| 2348 | Private | X | | | X | | | | | | | | | |
| 2349 | Private | X | | | X | | | | | | | | | |
| 2350 | BLM | | | | X | | | | | | | | | |
| 2351 | BLM | | | | X | | | | | | | | | |
| 2352 | BLM | X | | | X | | | | | | | | | |
| 2353 | Private | | | | X | | | | | | | | | |
| 2354 | Private | | | | X | | | | | | | | | |
| 2355ALTX | Private | | | | X | | | | | | | | | |
| 2356ALT | Private | X | | | X | | | | | | | | | |
| 2400 | BLM | | | | X | | | | | | | | | |
| 2401 | BLM | X | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2402 | BLM | | | | X | | | | | | | | | |
| 2403 | Private | | | | X | | | | | | | | | |
| 2404 | Private | | | | X | | | | | | | | | |
| 2405 | Private | | | | X | | | | | | | | | |
| 2406 | Private | | | | X | | | | | | | | | |
| 2407 | Private | | | | X | | | | | | | | | |
| 2408 | Private | X | | | X | | | | | | | | | |
| 2409 | Private | | | | X | | | | | | | | | |
| 2410 | BLM | X | | | X | | | | | | | | | |
| 2411 | BLM | X | | | X | | | | | | | | | |
| 2412 | BLM | | | | X | | | | | | | | | |
| 2413 | BLM | | | | X | | | | | | | | | |
| 2414 | BLM | X | | | X | | | | | | | | | |
| 2415 | BLM | X | | | X | | | | | | | | | |
| 2416 | BLM | | | | X | | | | | | | | | |
| 2417 | BLM | | | | X | | | | | | | | | |
| 2418 | BLM | | | | X | | | | | | | | | |
| 2419 | BLM | | | | X | | | | | | | | | |
| 2420 | Private | | | | X | | | | | | | | | |
| 2421XX | Private | | | | X | | | | | | | | | |
| 2422 | Private | | | | X | | | | | | | | | |
| 2423 | Private | | | | X | | | | | | | | | |
| 2424 | BLM | | | | X | | | | | | | | | |
| 2425 | BLM | | | | X | | | | | | | | | |
| 2426 | BLM | X | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2427 | BLM | | | | X | | | | | | | | | |
| 2428 | Private | | | | X | | | | | | | | | |
| 2429 | Private | X | | | X | | | | | | | | | |
| 2430 | Private | | | | X | | | | | | | | | |
| 2431 | BLM | X | | | X | | | | | | | | | |
| 2432 | BLM | X | | | X | | | | | | | | | |
| 2433 | BLM | | | | X | | | | | | | | | |
| 2434 | BLM | | | | X | | | | | | | | | |
| 2435 | BLM | | | | X | | | | | | | | | |
| 2436 | BLM | | | | X | | | | | | | | | |
| 2437 | BLM | | | | X | | | | | | | | | |
| 2438 | BLM | | | | X | | | | | | | | | |
| 2439 | BLM | | | | X | | | | | | | | | |
| 2440 | BLM | X | | | X | | | | | | | | | |
| 2441 | BLM | | | | X | | | | | | | | | |
| 2442 | BLM | X | | | X | | | | | | | | | |
| 2443 | BLM | | | | X | | | | | | | | | |
| 2443ALT | BLM | | | | X | | | | | | | | | |
| 2444 | BLM | | | | X | | | | | | | | | |
| 2445 | BLM | | | | X | | | | | | | | | |
| 2446 | BLM | X | | | X | | | | | | | | | |
| 2447 | BLM | | | | X | | | | | | | | | |
| 2448 | BLM | | | | X | | | | | | | | | |
| 2449 | Private | | | | X | | | | | | | | | |
| 2450X | BLM | X | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2451 | BLM | | | | X | | | | | | | | | |
| 2452 | Private | | | | X | | | | | | | | | |
| 2453 | BLM | X | | | X | | | | | | | | | |
| 2454 | BLM | X | | | X | | | | | | | | | |
| 2455 | Private | | | | X | | | | | | | | | |
| 2456 | Private | X | | | X | | | | | | | | | |
| 2457 | Private | | | | X | | | | | | | | | |
| 2458 | Private | | | | X | | | | | | | | | |
| 2500 | Private | | | | X | | | | | | | | | |
| 2501 | Private | | | | X | | | | | | | | | |
| 2502 | Private | X | | | X | | | | | | | | | |
| 2503 | Private | | | | X | | | | | | | | | |
| 2504 | Private | X | | | X | | | | | | | | | |
| 2505 | Private | | | | X | | | | | | | | | |
| 2506 | BLM | X | | | X | | | | | | | | | |
| 2507 | BLM | | | | X | | | | | | | | | |
| 2508 | BLM | | | | X | | | | | | | | | |
| 2509 | BLM | | | | X | | | | | | | | | |
| 2510 | BLM | X | | | X | | | | | | | | | |
| 2511 | BLM | X | | | X | | | | | | | | | |
| 2512 | BLM | X | | | X | | | | | | | | | |
| 2513 | BLM | X | | | X | | | | | | | | | |
| 2514 | BLM | X | | | X | | | | | | | | | |
| 2515 | BLM | X | | | X | | | | | | | | | |
| 2516 | BLM | | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2517 | BLM | | | | X | | | | | | | | | |
| 2518 | BLM | X | | | X | | | | | | | | | |
| 2519 | Private | X | | | X | | | | | | | | | |
| 2520 | Private | X | | | X | | | | | | | | | |
| 2521 | Private | X | | | X | | | | | | | | | |
| 2522 | BLM | | | | X | | | | | | | | | |
| 2523 | BLM | X | | | X | | | | | | | | | |
| 2524 | BLM | X | | | X | | | | | | | | | |
| 2525 | BLM | X | | | X | | | | | | | | | |
| 2526 | BLM | X | | | X | | | | | | | | | |
| 2527 | BLM | X | | | X | | | | | | | | | |
| 2528 | BLM | X | | | X | | | | | | | | | |
| 2529 | BLM | | | | X | | | | | | | | | |
| 2530 | BLM | X | | | X | | | | | | | | | |
| 2531 | BLM | X | | | X | | | | | | | | | |
| 2532 | BLM | X | | | X | | | | | | | | | |
| RB1-2W | BLM | | | | X | | | | | | | | | |
| RB1-4E | BLM | | | | X | | | | | | | | | |
| RB1-5E | BLM | | | | X | | | | | | | | | |
| RB2 | BLM | | | | X | | | | | | | | | |
| RB2-4E | BLM | | | | X | | | | | | | | | |
| RB2-5E | BLM | X | | | X | | | | | | | | | |
| RB7 | BLM | | | | X | | | | | | | | | |
| RB8 | BLM | | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Red Bluff to CRS Segment** | | | | | | | | | | | | | | |
| 2534 | BLM | X | | | X | | | | | | | | | |
| 2535ALTX | BLM | | | | X | | | | | | | | | |
| 2536 | BLM | | | | X | | | | | | | | | |
| 2537 | BLM | | | | X | | | | | | | | | |
| 2538 | BLM | | | | X | | | | | | | | | |
| 2539 | BLM | | | | X | | | | | | | | | |
| 2540 | BLM | X | | | X | | | | | | | | | |
| 2541 | BLM | | | | X | | | | | | | | | |
| 2542X | BLM | | | | X | | | | | | | | | |
| 2543 | BLM | X | | | X | | | | | | | | | |
| 2544 | BLM | X | | | X | | | | | | | | | |
| 2545 | BLM | | | | X | | | | | | | | | |
| 2546X | BLM | X | | | X | | | | | | | | | |
| 2547 | BLM | | | | X | | | | | | | | | |
| 2548 | BLM | | | | X | | | | | | | | | |
| 2549 | BLM | | | | X | | | | | | | | | |
| 2550 | BLM | X | | | X | | | | | | | | | |
| 2552 | BLM | X | | | X | | | | | | | | | |
| 2553 | BLM | | | | X | | | | | | | | | |
| 2554 | BLM | X | | | | | | | | | | | | |
| 2555 | BLM | | | | X | | | | | | | | | |
| 2556 | Private | | | | X | | | | | | | | | |
| 2557 | Private | X | | | X | | | | | | | | | |
| 2558 | BLM | | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2559 | BLM | | | | X | | | | | | | | | |
| 2560 | BLM | X | | | X | | | | | | | | | |
| 2561 | Private | X | | | X | | | | | | | | | |
| 2562 | Private | X | | | X | | | | | | | | | |
| 2563 | Private | | | | X | | | | | | | | | |
| 2564 | BLM | X | | | X | | | | | | | | | |
| 2565 | BLM | | | | X | | | | | | | | | |
| 2566 | BLM | | | | | | | | | | | | | |
| 2567 | BLM | | | | X | | | | | | | | | |
| 2568 | BLM | | | | X | | | | | | | | | |
| 2569 | BLM | | | | X | | | | | | | | | |
| 2570 | BLM | | | | X | | | | | | | | | |
| 2571 | BLM | | | | X | | | | | | | | | |
| 2572 | BLM | | | | X | | | | | | | | | |
| 2573 | BLM | | | | X | | | | | | | | | |
| 2574 | BLM | | | | X | | | | | | | | | |
| 2575 | Private | X | | | X | | | | | | | | | |
| 2576 | BLM | | | | X | | | | | | | | | |
| 2577 | BLM | | | | X | | | | | | | | | |
| 2600 | BLM | | | | X | | | | | | | | | |
| 2601 | BLM | | | | X | | | | | | | | | |
| 2602 | BLM | | | | X | | | | | | | | | |
| 2603 | BLM | | | | X | | | | | | | | | |
| 2604 | BLM | | | | X | | | | | | | | | |
| 2605 | BLM | | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2606 | Private | X | | | X | | | | | | | | | |
| 2607 | Private | | | | X | | | | | | | | | |
| 2608 | Private | | | | X | | | | | | | | | |
| 2609 | BLM | | | | X | | | | | | | | | |
| 2610 | BLM | X | | | X | | | | | | | | | |
| 2611 | BLM | | | | X | | | | | | | | | |
| 2612 | Private | | | | X | | | | | | | | | |
| 2613 | Private | | | | X | | | | | | | | | |
| 2614 | Private | | | | X | | | | | | | | | |
| 2615 | BLM | | | | X | | | | | | | | | |
| 2616 | BLM | | | | X | | | | | | | | | |
| 2617 | BLM | | | | X | | | | | | | | | |
| 2618 | BLM | X | | | X | | | | | | | | | |
| 2619 | BLM | X | | | X | | | | | | | | | |
| 2620 | BLM | | | | X | | | | | | | | | |
| 2621 | BLM | | | | X | | | | | | | | | |
| 2622X | BLM | X | | | X | | | | | | | | | |
| 2623 | BLM | | | | X | | | | | | | | | |
| 2624 | BLM | X | | | X | | | | | | | | | |
| 2625 | BLM | | | | X | | | | | | | | | |
| 2626 | Private | | | | X | | | | | | | | | |
| 2627 | Private | X | | | X | | | | | | | | | |
| 2628 | BLM | | | | X | | | | | | | | | |
| 2629 | Private | X | | | X | | | | | | | | | |
| 2630 | BLM | X | | | X | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2631 | BLM | | | | X | | | | | | | | | |
| 2632 | BLM | X | | | X | | | | | | | | | |
| 2633 | BLM | X | | | X | | | | | | | | | |
| 2634 | BLM | | | | X | | | | | | | | | |
| 2635 | BLM | X | | | X | | | | | | | | | |
| 2636 | BLM | X | | | X | | | | | | | | | |
| 2637 | BLM | X | | | X | | | | | | | X | | |
| 2638 | BLM | | | | X | | | | | | X | | | |
| 2639 | BLM | X | | | X | | | | | | | X | | |
| 2640 | Private | X | | X | | | | | | | | X | | |
| 2641 | Private | X | | X | | | | | | | | X | | |
| 2642 | BLM | | | X | | | | | | | | | | |
| 2643 | BLM | | | X | | | | | | | X | | | |
| 2644 | BLM | | | X | | | | | | | | X | | |
| 2645 | Private | | | X | | | | | | | | X | | |
| 2646 | BLM | X | | X | | | | | | | | X | | |
| 2647 | BLM | X | | X | | | | | | | | | | |
| 2648 | BLM | | | X | | | | | | | | X | | |
| 2649 | BLM | X | | X | | | | | | | | X | | |
| 2650 | BLM | | | X | | | | | | | | | | |
| 2651 | BLM | X | | X | | | | | | | | | | |
| 2652 | BLM | | | X | | | | | | | | | | |
| 2653 | BLM | X | | X | | | | | | | | | | |
| CR1-1W | BLM | | | X | | | | | | | | | | |
| CR1-1E | BLM | X | | X | | | | | | | | | | |

## Appendix 10. Resources and Jurisdictions by DPV2 Transmission Line Tower

| Tower No. | Jurisdiction | Cultural & Paleontological Resources | Desert Tortoise Modeled Habitat | Desert Tortoise Occupied Habitat | Desert Tortoise Critical Habitat | Desert Tortoise Critical Habitat | Coachella Valley Milk-vetch Modeled Habitat | Coachella Valley Fringe-toed Modeled Habitat | Coachella Valley Fringe-toed Critical Habitat | Flat-tailed Horned Lizard Modeled Habitat | Mojave Fringe-toed Lizard Potential Habitat | Mojave Fringe-toed Lizard Occupied Habitat | Stephen's Kangaroo Rat Occupied Habitat | Potential California Gnatcatcher Habitat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CR1-2E | BLM | X | | X | | | | | | | | | | |
| CR1-2W | BLM | | | X | | | | | | | | | | |
| CR1-3E | BLM | | | X | | | | | | | | | | |
| CR1-3W | BLM | X | | X | | | | | | | | | | |
| CR1-4E | BLM | X | | X | | | | | | | | | | |
| CR1-4W | BLM | | | X | | | | | | | | | | |
| CR1-5E | BLM | X | | X | | | | | | | | | | |
| CR1-5W | BLM | | | X | | | | | | | | | | |

## Appendix 11. Helicopter Nest Buffer Violations on the DPV2 Transmission Line Project

| Date | Nest ID / Nearest Tower | Tail Number (Helicopter Type) | Notes* |
|---|---|---|---|
| 2/2/13 | Nest ID 2212 (near Tower 1070) | N569KB (K-Max) | The helicopter entered the ESA buffer twice while crews were removing equipment from Tower 1070. |
| 2/5/13 | Nest ID 2200 (near Tower 2406) | N11056 (H-500) | The helicopter entered the 300ft ESA buffer multiple times. |
| 2/5/13 | Nest ID 2200 (near Tower 2406) | N900FF (H-500) | The helicopter entered the 300ft ESA buffer multiple times. |
| 2/13/13 | Nest ID 2226 (near Tower 2130) | N11056 (H-500) | The helicopter entered the buffer several times (lowest ping was 164ft AGL in a 300ft buffer). |
| 2/22/13 | Nest ID 2318 (near Tower 2229) | N5205G (H-500) | The pilot flew into the buffer, realized his mistake, and turned the helicopter around. |
| 2/27/13 | Nest ID 2205-R1 (near Tower 2405) | N11056 (H-500) | The helicopter entered the 300ft vertical and 100ft horizontal nest buffer, encroaching vertically at 228ft AGL. |
| 3/4/13 | Nest ID 2318 (near Tower 2229) | N5205G (H-500) | The helicopter entered the 300ft nest buffer; encroaching 126ft. SCE self-reported the violation. |
| 3/5/13 | Nest ID 2318 (near Tower 2229) | N5205G (H-500) | The helicopter entered the 300ft nest buffer; encroaching 237ft. SCE self-reported the violation. |
| 3/5/13 | Nest ID 2318 (near Tower 2229) | N530PJ (H-500) | The helicopter entered the 300ft nest buffer; encroaching 196ft. SCE self-reported the violation. |
| 3/5/13 | Nest ID 2259 (near Tower 2238) | N5205G (H-500) | The helicopter entered the 300ft nest buffer; encroaching 168ft. SCE self-reported the violation. |
| 3/5/13 | Nest ID 2318 (near Tower 2229) | N900FF (H-500) | The helicopter entered the 300ft nest buffer; encroaching 226ft. SCE self-reported the violation. |
| 3/6/13 | Nest ID 2318 (near Tower 2229) | N5205G (H-500) | The helicopter entered the 300ft nest buffer; encroaching 215ft. |
| 3/7/13 | Nest ID 2259 (near Tower 2238) | N900FF (H-500) | The helicopter entered the 300ft nest buffer; encroaching 87ft. SCE self-reported the violation. |
| 3/7/13 | Nest ID 2318 (near Tower 2229) | N900FF (H-500) | The helicopter entered the 300ft nest buffer; encroaching 219ft. SCE self-reported the violation. |
| 3/7/13 | Nest ID 2318 (near Tower 2229) | N5205G (H-500) | The helicopter entered the 300ft nest buffer; encroaching 261ft. SCE self-reported the violation. |
| 3/8/13 | Nest ID 2230 (near Tower 2214) | N900FF (H-500) | The helicopter entered the 300ft nest buffer; encroaching 73ft. SCE self-reported the violation. |
| 3/9/13 | Nest ID 2350 (near Tower 1073) | N569KB (H-500) | The helicopter entered the 300ft nest buffer; encroaching 175ft. SCE self-reported the violation. |
| 3/11/13 | Nest ID 2259 (near Tower 2238) | N5205G (H-500) | The helicopter entered the 300ft nest buffer numerous times throughout the day with a maximum encroachment of 229ft. SCE self-reported the violation. |
| 3/12/13 | Nest ID 2318 (near Tower 2229) | N11056 (H-500) | The helicopter entered the 300ft nest buffer; encroaching 194ft. SCE self-reported the violation. |
| 3/13/13 | Nest ID 2259 (near Tower 2238) | N11056 (H-500) | The helicopter entered the 300ft nest buffer, encroaching 221ft. SCE self-reported the violation. |
| 3/15/13 | Nest ID 2259 (near Tower 2238) | N11056 (H-500) | The helicopter entered the 300ft nest buffer numerous times throughout the day with a maximum encroachment of 158ft. SCE self-reported the violation. |
| 4/9/13 | Nest ID 2491 (near Tower 1105) | N161KA (K-Max) | The helicopter entered the 300ft nest buffer, encroaching 215ft. |
| 4/17/13 | Nest ID 2231 (near Tower 1107) | N318MG (A-Star) | The helicopter entered the 300ft nest buffer; encroaching 210ft. SCE self-reported the violation. |
| 5/3/13 | Nest ID 2656 (at Tower 1039) | N900FF (H-500) | The helicopter entered the 300ft nest buffer, encroaching 225ft. |

## Appendix 11. Helicopter Nest Buffer Violations on the DPV2 Transmission Line Project

| Date | Nest ID / Nearest Tower | Tail Number (Helicopter Type) | Notes* |
|---|---|---|---|
| 5/4/13 | GOEA Buffer | N818MC (A-Star) | The helicopter entered the GOEA buffer approximately 1,500ft at approximately 500ft AGL to investigate and report a wildfire incident. SCE self-reported the violation. |
| 5/9/13 | Nest ID 2129 (near Tower 1019) | N530PJ (H-500) | The helicopter entered both 300ft nest buffers by approximately 210ft. SCE self-reported the violation. |
| 5/13/13 | Nest ID 2330 (near Tower 1052) | N5205G (H-500) | The helicopter entered the nest buffer with a nest ceiling at 220ft AGL, with lowest ping at 213ft AGL (7ft into buffer). |
| 5/14/13 | Nest ID 2604 (near Tower 1057) | N5205G (H-500) | The helicopter entered the nest buffer with a nest ceiling at 300ft AGL, with lowest ping at 183ft AGL (117ft into buffer). |
| 5/14/13 | Nest ID 2603 (near Tower 1057) | N5205G (H-500) | The helicopter entered the nest buffer with a nest ceiling at 300ft AGL, with lowest ping at 96ft AGL (204ft into buffer). |
| 5/14/13 | Nest ID 2630 (near Tower 1055) | N5205G (H-500) | The helicopter entered the nest buffer with a nest ceiling at 450ft AGL, with lowest ping at 289ft AGL (161ft into buffer). |
| 5/14/13 | Nest ID 2330 (near Tower 1052) | N5205G (H-500) | The helicopter entered the nest buffer with a nest ceiling at 220ft AGL, with lowest ping at 163ft AGL (57ft into buffer). |
| 5/30/13 | Nest ID 2630 (near Tower 1055) | N530PJ (H-500) | The helicopter entered the nest buffer with a nest ceiling at 450ft AGL, with the lowest ping at 216ft AGL. |
| 5/31/13 | Nest ID 2630 (near Tower 1055) | N530PJ (H-500) | The helicopter entered the nest buffer with a nest ceiling at 450ft AGL, with the lowest ping at 204ft AGL. |
| 6/1/13 | Nest ID 2710 (near Tower 1051) | N518MF (A-Star) | The helicopter entered the nest buffer with a nest ceiling at 170ft AGL ceiling, with the lowest ping at 57ft AGL. |
| 6/11/13 | Nest ID 2721 (near Tower 1073) | N530PJ (H-500) | The helicopter entered the 450ft nest buffer, encroaching into the buffer 156ft near the buffer center. |
| 6/12/13 | Nest ID 2710 (near Tower 1051) | N569KB (K-Max) | The helicopter entered the 300ft nest buffer, encroaching into the buffer 145ft bisecting the inner half of the buffer circle. |
| 6/13/13 | Nest ID 2721 (near Tower 1073) | N530PJ (H-500) | The helicopter entered the 450ft nest buffer, encroaching into the buffer 144ft — but only 8ft horizontally. |
| 6/14/13 | Nest ID (2763 near Tower 1084) | N5205G (H-500) | The helicopter entered the 160ft nest buffer, encroaching into the buffer 56ft — but only 12ft horizontally. |
| 6/26/13 | Nest ID 2768 (near Tower 1100) | N52056 (H-500) | The helicopter entered the 300ft vertical buffer, encroaching at 110ft AGL (190ft into buffer). This buffer was reduced horizontally to 50ft on 6/13. |
| 7/9/13 | Nest ID 2768 (near Tower 1100) | N5205G (H-500) | The helicopter entered the 300ft vertical buffer, encroaching near the buffer center at 239ft AGL (61ft into buffer). |
| 7/9/13 | Nest ID 2768 (near Tower 1100) | N530PJ (H-500) | The helicopter entered the 300ft vertical buffer, encroaching near the buffer center at 247ft AGL (53ft into buffer). |
| 7/10/13 | Nest ID 2768 (near Tower 1100) | N5205G (H-500) | The helicopter entered the 300ft vertical buffer, with N5205G encroaching near the buffer center at 222ft AGL (78ft into buffer). |

*AGL = above ground level

# Memorandum

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**Date:** November 1, 2013

**To:** Vida Strong

**Cc:** Rosina Goodman, Shelby Howard

**From:** Deborah Clayton

**Subject:** DPV2 2013 Nesting Season Summary

**HELIX Proj. No.:** AEG-03.05

**Message:**

This memo provides a summary of the nest buffer reduction process and related issues that occurred during the 2013 nesting season during construction of the Devers-Palo Verde 2 transmission line project (DPV2).

The CPUC and BLM (as CEQA and NEPA Lead Agencies, respectively) adopted Mitigation Measure B-5a when DPV2 was approved. Mitigation Measure B-5a states:

| | |
|---|---|
| **B-5a** | **Conduct pre-construction surveys and monitoring for breeding birds.** SCE shall conduct protocol level surveys for nesting birds if construction activities are scheduled to occur during the breeding season for raptors and other migratory birds. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. SCE shall be responsible for designating a CPUC/BLM-approved qualified biologist who can conduct pre-construction surveys and monitoring for breeding birds. If State or federally listed birds with active nests are found, a biological monitor shall establish a 500-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the 500-foot buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring. A 300-foot buffer shall be implemented in the event that raptors or other species protected under the MBTA are located. This buffer will be evaluated after consultation with the CPUC/BLM/CDFG/and USFWS. |

## Buffer Reduction Request Process and Requests for Exceptions/Exemptions

During the 2012 breeding season, SCE requested buffer reductions from the California Department of Fish and Game (became California Department of Fish and Wildlife [CDFW] in 2013). For the 2013 breeding season, the CDFW stated that there had been a clarification on CDFW policy and that it would no longer be commenting on buffer reduction requests or issuing buffer reductions. As a result, the task

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was redirected to the CPUC, so CPUC's contractor, Aspen Environmental Group (Aspen), subcontracted with HELIX Environmental Planning, Inc. (HELIX) to address the requests in coordination with BLM. HELIX's previous experience reviewing nest buffer reduction requests included reviews in 2011 and 2012 for SDG&E's Sunrise Powerlink transmission line project.

In mid February 2013, HELIX began receiving requests for buffer reductions, but there was no real process in place to provide HELIX with enough information to adequately assess the requests. Therefore, Aspen and HELIX prepared the Mitigation Measure B-5a Implementation Process (Process), and after several conference calls with SCE and document revisions, a final Process with Standard Operating Procedures was put in place in April 2013. Initially, there was some difficulty with SCE coordinating with its biologists in the field and with its construction contractor to provide the required information in the requests per the Process. Also, there were instances where the conditions of acceptance of buffer reductions were not followed. However, this too, was eventually corrected. The Process worked more smoothly once everyone involved was better informed of what was required for a buffer reduction request and what conditions needed to be followed for a request to be accepted.

As the nesting season progressed, SCE had several requests for exceptions/exemptions to the Process, as follows.

On April 23, 2013, SCE requested a variance to add temporary walking paths within SCE's Right of Way on privately owned land from Towers 1031 to 1032, 1034 to 1037, and 1048 to 1051. The paths would allow micropile foundation and other crews to continue work during inclement wind conditions that prevent helicopters from safely landing at temporary landing platforms. Due to the terrain, SCE requested that the survey area required for walking paths be reduced from 300 feet on each side of the path to 20 feet on each side of the path, which Aspen and HELIX accepted along with these conditions:

- The vegetation along a path is not to be touched (i.e., brushed against intentionally, branches pulled, branches cut, etc.).
- Voice volume should be kept to a minimum at all times, and there should be no talking when within an ESA nest buffer.
- Loitering on a path is prohibited.
- Straying from a path is prohibited.

In May 2013, SCE requested limited exemptions from the Process for activities it considered to be "low-intensity." Aspen and HELIX agreed that certain activities could be exempted, and SCE's Limited Exemptions from the Formal DPV2 Temporary Nest Buffer Reduction Process for Low-intensity Project Activities was accepted by Aspen and HELIX on May 8, 2013. This document outlined the requirements for conducting low-intensity activities within 300 feet of a nest without the need to establish a formal temporary buffer reduction. The low-intensity activities included:

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- Site Staking/Flagging and Re-staking/Re-flagging
- Repair of Damaged Straw Wattles and BMP Fencing
- Blow Sand Area BMP Maintenance Activities
- DPV2/DPV1 Tower Buoy Installation
- Tower QA/QC Site Finalization Activities
- Fiber Optic Splicing at Tower Splice Box
- Resistance Testing
- Mile-marker Painting

Throughout the 2013 nesting season SCE made other requests for exceptions to the Process such as:

- Not conducting 10-day, on-the-ground surveys where there would be no ground work (i.e., there would only be access to a tower via helicopter, and work would occur on a tower).
    - This was accepted under the condition that an agency-approved avian biologist survey the tower from a helicopter, with binoculars, immediately prior to the tower work.

- Not conducting 10-day surveys for unexpected, brief activities such as removing a piece of equipment from a site—including within an established nest buffer.
    - This was accepted under the condition that the site be swept[1] immediately prior to the activity and that an agency-approved avian biologist be present to observe the nest/nesting birds during the activity.

- Submitting a single buffer reduction request for the smallest buffer needed for all remaining work at a site (which could include initial delivery of steel all the way through wire stringing).
    - This was not accepted because the remaining work could take months, and bird sensitivity to activities may change as the nest status changes (e.g., from nest construction all the way through to near fledging).

One major concern during the 2013 nesting season was the use of aircranes to construct some of the towers. Several conference calls were held in April to discuss this issue, including a call with CPUC, Aspen, HELIX, BLM, and CDFW. SCE later provided information documenting why it believed that the aircrane rotor wash and noise would not be a risk to nests on the ground or in adjacent towers. The ultimate conclusion, however, was that while CPUC, BLM, CDFW, HELIX, and Aspen were still concerned about nests near aircrane operations, the risk of violating California Fish and Game Code (CFGC) and/or the Migratory Bird Treaty Act was SCE's right to take, and that the best CPUC, BLM, CDFW, HELIX, and Aspen could do is place conditions on the aircrane work to minimize the risk when a nest buffer reduction was requested. Those conditions included the following.

[1] Swept meant that a search for nesting birds was to be conducted by a biologist within the work area and an adjacent 100-foot buffer prior to the activity.

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Consistent with air and ground safety requirements, the following shall apply:

1. No take-offs, flights, or landings shall occur within any nest buffer for which a specific reduction for aircrane, K-max (or equivalent), or light-duty helicopter use has not been accepted.
2. All helicopters shall approach the DPV2 tower so as not to fly over the DPV1 line if there is a nest in the DPV1 tower.
3. All helicopters shall maintain an elevation of 120 feet or higher above ground level at all times when within 300 horizontal feet of a nest.
4. A minimum 100-foot long line shall be used for transporting tower sections and equipment.
5. The time to set each tower piece (i.e., hover time at the tower) shall be limited to no more than 5 minutes whenever possible.
6. The helicopters shall leave the pick site or tower site the same way that they approached.
7. The helicopter–based assembly and erection process (including the picks from HLZs, wire sites, or tower sites) shall be monitored by an agency-approved avian biologist (not a bio monitor supervised by an AFC) from start to finish.
8. Where possible, the nest shall be photographed before and after the construction activities.
9. If the avian biologist determines that the birds are being adversely affected by the activities at any time, he/she will call a temporary halt to the work and continue to monitor the birds. If the birds continue to be negatively affected during the work stoppage or when the work is restarted, he/she will increase the buffer as much as necessary to alleviate the negative reaction of the birds.
10. The nest shall be checked, and the status of the nest and the nesting birds shall be ascertained the day after construction concludes.
11. Detailed observations of the birds' behaviors before, during, and after the activities at the pick sites and assembly/erection sites shall be included in daily monitoring reports, including but not limited to any damage to or loss of the nest, any injury or mortality to the nesting birds, or the abandonment of the nest. Nest photos should also be included with the daily monitoring reports.
12. Wherever feasible, sites shall be watered by truck (with a hose if necessary).
13. If water drops must be made by helicopter, the drops shall be made using a long line whenever possible.
14. Water drops shall be conducted in such a manner that water is not sprayed or does not splash onto the nest to the extent feasible.

SCE reported no nest failures from the aircrane operations.

**Nest Removals**

SCE found it necessary to remove partially constructed nests due to the time-critical nature of the nests' status and construction work plans. SCE stated that it believed the removal of the partially constructed nests was not "needless" under CFGC 3503. The CPUC (and, therefore, Aspen and HELIX) was not

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involved in reviewing or approving nest removals; this was left up to the CDFW, to which SCE was reporting nest removals (and copying CPUC, Aspen, and HELIX). SCE removed a total of 10 partially constructed nests of the western kingbird (6), cactus wren (2), and house finch (2) from helicopter landing zone sites and tower sites.

**Buoys**

Buoys were installed above tower bridges to deter avian nesting. During 2013 nesting season, a total of 193 DPV1 and DPV2 towers had buoys in them as follows.

- 52 of the DPV1 towers had buoys.
- 133 DPV2 towers had buoys installed in them as of May 9, 2013; buoys were installed in the remaining 8 towers as they were subsequently constructed.

Of the total 193 towers with buoys, 14 had nesting observed in them during the 2013 nesting season as described below. Since nesting bird surveys and monitoring did not occur once construction was complete in an area, it is possible that additional nesting occurred in towers with buoys that went undiscovered.

- 11 nests were located in DPV1 towers. These nests were all of either red-tailed hawks (6 pair) or common ravens (5 pair). In all 11 towers, birds nested (or began to nest) despite the buoys, and in one case, the red-tailed hawks just pushed the buoy aside. In another instance, the red-tailed hawks moved from a tower with a buoy located over the (existing) nest to a nearby DPV2 tower (with a buoy) to nest. The buoy in the DPV2 tower was not in its proper place.
- 3 nests were located in DPV2 towers. One was of the aforementioned red-tailed hawks that moved to the nearby DPV2 tower to nest. Another was a Cassin's kingbird nest constructed under the buoy. The third was a house finch nest built behind the buoy.

**Conflicting Opinions**

There were repeated conflicting opinions between HELIX/BLM/Aspen and SCE about what would constitute enough risk to the nest/nesting birds to warrant stopping (i.e., at least temporarily halting) construction. According to the Process and one of the conditions that Aspen and HELIX placed on acceptance of a buffer reduction:

> *If the avian biologist or biological monitor determines that the birds are being adversely affected by the activities at any time, he/she will call a temporary halt to the work and continue to monitor the birds. If the birds continue to be negatively affected during the work stoppage or when the work is restarted, he/she will increase the buffer as much as necessary to alleviate the negative reaction of the birds.*

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SCE included a similar statement in its buffer reduction requests, yet in HELIX's/BLM's/Aspen's opinion, SCE did not implement the condition when needed. SCE's response was that, in its opinion, many species had been tolerant of construction on other projects or are tolerant of human activity, in general, so the work only posed a low risk to the nest.

**Nest Buffer Reduction Requests in 2013**

Approximately 385 nest buffer reduction requests were submitted by SCE and reviewed by HELIX from mid February through late July 2013.

Of those, 26 were not accepted because HELIX, the BLM, and Aspen believed that the proposed work would pose too great a risk to the nest/nesting birds. Under most of these circumstances, the work was either postponed until the nestlings had fledged, or SCE revised the proposed construction methods, timing, etc. to reduce the risk to a low level, which then made the requested reduced buffer acceptable. It does not appear that the non-acceptance of any requested reduced buffer caused SCE any significant construction delay. During the 2013 nesting season, SCE reported (to its Field Reporting Environmental Database [FRED]) no project-related nest failures, with or without reduced buffers, other than those 10 partially constructed nests that were intentionally removed.

On August 15, 2013, SCE requested discontinuing 10-day nest surveys due to the absence of new active nests found since July 24th. SCE believed this supported a determination that the breeding bird season in the DPV2 project area had concluded for 2013. HELIX and Aspen agreed but clarified that SCE should continue conducting the usual, daily, pre- and post-work sweeps including looking for nesting bird activity during those sweeps.

**Conclusions/Lessons Learned**

A Nesting Bird Monitoring and Management Plan (NBMMP) or some other mitigation implementation process needs to be in place before the nesting season begins (and preparation of such document should be a requirement of a mitigation measure for protecting nesting birds). The plan or process should be prepared by the utility and should address all types and intensities of construction from project initiation to end (e.g., site prep through site stabilization and QA/QC, and should include the use of all different types/sizes of helicopters including aircranes). It should address adequate buffers (and provide documentation as to adequacy) depending on species and type of construction. It should describe the process for searching for nests (i.e., a nest survey protocol addressing survey methods, survey timing, and survey areas). It should also include protocol for requesting nest buffer reductions and should address nest removals. The plan or process should be approved by the CPUC and BLM (if BLM-managed land is involved), USFWS, and CDFW prior to the start of construction. Having such a plan or process in place prior to construction should reduce the number of buffer reduction requests needed to be made and would put all parties involved on the same page from the onset of the nesting season. This would result in time and money saved while simultaneously protecting nesting birds and meeting mitigation requirements for nesting birds.

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There is consensus among the CPUC, BLM, USFWS, CDFW, Aspen, HELIX, and SCE that the 300-foot buffer requirement prescribed by Mitigation Measure B-5a may be too conservative, particularly for common, non-sensitive species. This may be why the mitigation measure allowed for further evaluation of the prescribed buffer in consultation with the CPUC/BLM/CDFG/and USFWS. During the 2013 nesting season, approximately 385 nest buffer reduction requests were submitted by SCE. The acceptance of approximately 93 percent of the requests (after careful analysis of the nest-specific, site-specific, and activity-specific circumstances of each request), along with SCE's reported no project-related nest failures (with or without reduced buffers) provides evidence that some reduction in buffer distances may be appropriate for certain species, or guilds of species, depending on site-specific and activity-specific circumstances. Such reduced buffers could be addressed in an NBMMP. Approval of an NBMMP could avoid many of the requests for buffer reductions—like those 385 requests made by SCE in 2013 for DPV2.

Buoys may not be very effective at deterring nesting on tower bridges and likely do not deter nesting on other portions of towers (e.g., house finches nested frequently on tower legs according to FRED Nest Event records for DPV2). Perhaps: 1) the relative newness of the DPV2 towers; 2) the fact that many were constructed during the 2013 nesting season leaving less time for red-tailed hawk and common raven nest establishment; and 3) potential nest site fidelity for established nests in the DPV1 towers may explain the apparent lower level of nesting in the DPV2 towers as compared with the DPV1 towers. Since nesting bird surveys and monitoring did not occur once construction was complete in an area, it is possible that additional nesting occurred in towers with buoys but went undiscovered. The observations from the 2013 nesting season suggest that buoys may be only somewhat effective at deterring nesting on tower bridges and may be ineffective at deterring nesting on other portions of towers.

**Agency and Consultant Personnel Involved**

**CPUC**: Billie Blanchard, Senior Analyst | Project Manager Infrastructure Permitting & CEQA

**BLM**: Dr. Larry LaPre, Wildlife Biologist

**CDFW**: Magdalena Rodriguez, Staff Environmental Scientist

**Aspen**: Fritts Golden, Senior Associate

Vida Strong, Senior Associate

Ryann Loomis, Lead Environmental Monitor

Jamie Miner, Rosina Goodman—Environmental Monitors

Carla Wakeman, Associate Biologist

**HELIX**: Deborah Clayton, Senior Scientist

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2198 | 1004 | Burrowing Owl | Approved for wire stringing activities (Helicopter: 200ft Horizontal, 300ft Vertical) | The buffer reduction was requested due to fresh scat and white wash found at the burrow site. No owls were ever observed at the site. | No owls were ever observed at the burrow. |
| 2379 | 1010 | Common Raven | Approved for wire stringing (Ground: 50ft; Helicopter: 50ft Horizontal, 300ft Vertical), site stabilization and QA/QC activities (Ground: 30ft; Helicopter: 50ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. One observation of mild agitation was reported during helicopter activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 947 | 1019 | Burrowing Owl | Approved for wire stringing activities (Helicopter: 130ft Horizontal, 300ft Vertical) and site stabilization (Ground: 120ft) | Avian Specialists were assigned to monitor the burrow throughout construction activities. No agitated behavior was observed, the Avian Specialists determined the owls were unaffected by the construction activities. | The burrow outcome is reported as unknown. Once construction completed at the site, continuous monitoring ceased so fledging was not confirmed. |
| 988 | 1020 | Burrowing Owl | Approved for wire stringing activities (Helicopter: 50ft Horizontal, 100ft Vertical) | Avian Specialists were assigned to monitor the burrow throughout construction activities. No agitated behavior was observed, the Avian Specialists determined the owls were unaffected by the construction activities. | The burrow outcome is reported as unknown. Once construction completed at the site continuous monitoring ceased so fledging was not confirmed. |
| 1954 | 1020 | Burrowing Owl | Approved for wire stringing activities (Helicopter: 60ft Horizontal, 300ft Vertical) and site stabilization (Ground: 60ft) | Avian Specialists were assigned to monitor the burrow throughout construction activities. No agitated behavior was observed, the Avian Specialists determined the owls were unaffected by the construction activities. | Owlets were observed during continuous observations by the avian specialists. SCE reported this burrow to have successfully fledged. |
| 2206 | 1020 | Burrowing Owl | Approved for wire stringing activities (Ground: 50ft; Helicopter: 275ft Horizontal, 200ft Vertical) | Avian Specialists were assigned to monitor the burrow throughout construction activities. No agitated behavior was observed, the Avian Specialists determined the owls were unaffected by the construction activities. | Avian Specialists believed this burrow was occupied by the owls from adjacent burrows. No owlets were ever observed and once the owl left the area the burrow was deemed inactive. |
| 42 | 1020 | Burrowing Owl | Approved for Wire Stringing Activities (Ground: 130ft Ground; Helicopter: 130ft Horizontal) | Avian Specialists were assigned to monitor the burrow throughout construction activities. The Owls appeared agitated when the Specialist would approach the burrow but not by surrounding construction activities | Avian Specialists observed the adult owls feeding chicks throughout construction activities. On a subsequent visit the burrow was collapsed and was reported by SCE to have successfully fledged. |
| 2544 | 1025 | Common Raven | Approved for wire stringing (Ground: 125ft; Helicopter: 75ft Horizontal, 100ft Vertical), site stabilization and QA/QC activities (Ground: 150ft) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2479 | 1036 | Common Raven | Approved for Assembly/Erection and wire stringing activities (Ground: 45ft; Helicopter: 45ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2656 | 1039 | California Towhee | Approved for wire stringing activities (Ground: 50ft; Helicopter: 50ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2652 | 1050 | Lark Sparrow | Approved for continued use of a nearby helicopter landing platform (Ground: 200ft; Helicopter: 200ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | An Avian Specialists reported the nest likely successfully fledged. |
| 2330 | 1052 | Common Raven | A buffer reduction was denied during nest building but later approved for wire stringing activities once adults were feeding chicks (Ground: 0ft; Helicopter: 5ft Horizontal, 40ft Vertical) | Avian Specialists observed the adults feeding chicks throughout construction activities and reported no agitated or stressed behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2762 | 1052 | Northern Mockingbird | Approved for site stabilization activities (Ground: 132ft) | Avian Specialists observed adults incubating and then attending to chicks during construction activities. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2402 | 1054 | Common Raven | Approved for wire stringing activities (Ground: 0ft; Helicopter: 5ft Horizontal, 40ft Vertical) | Agitated behavior was observed during wire stringing activities while linemen were in the tower. The Avian Specialists put a hold on work until the adults returned to the nest to feed the chicks. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2624 | 1055 | Cactus Wren | Approved for wire stringing activities (Ground: 220ft; Helicopter: 200ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2630 | 1055 | Common Raven | Approved for wire stringing activities (Ground: 0ft; Helicopter: 50ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2603 | 1057 | Cactus Wren | Approved for wire stringing activities (Ground: 170ft; Helicopter: 170ft Horizontal, 300ft Vertical) | Avian Specialists checked the nest throughout construction activities and adults were observed at the nest periodically but they were unable to determine if eggs or chicks were in the nest. | An Avian Specialist observed fledglings near the nest and determined the nest successfully fledged. |
| 2605 | 1057 | Cactus Wren | Approved for wire stringing activities (Ground: 86ft; Helicopter: 130ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2405 | 1058 | Cactus Wren | Approved for wire stringing activities (Ground: 100ft; Helicopter: 110ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2211 | 1059 | Common Raven | Approved for wire stringing activities (Ground: 60ft; Helicopter: 60 Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2333 | 1059 | Cactus Wren | Approved for wire stringing activities (Ground 300ft; Helicopter: 15ft Horizontal, 150ft Vertical) | Avian Specialists observed adults going to the nest prior to construction activities occurring in the reduced buffer. No eggs or chicks were ever observed although there was an active nest nearby. | Avian Specialists reported the nest as inactive. |
| 2334 | 1059 | Cactus Wren | Approved for wire stringing activities (Ground: 300ft; Helicopter:15ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have fledged. |
| 2526 | 1059 | Cactus Wren | Approved for wire stringing activities (Ground: 270ft; Helicopter: 13ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have fledged. |
| 2327 | 1060 | Common Raven | A buffer reduction was denied twice during nest building but later approved for wire stringing activities once adults were feeding chicks (Ground: 0ft; Helicopter: 5ft Horizontal, 40ft Vertical) | The nest was determined inactive prior to construction activities. | Once construction activities started lineman in an adjacent tower confirmed no eggs or chicks were present in the nest and no ravens were present in the area. The Avian specialists deemed the nest inactive but could not confirm if the nest fledged or failed. |
| 2688 | 1064 | Cactus Wren | Approved for Assembly/Erection and wire stringing activities (Ground: 35ft; Helicopter: 30ft Horizontal, 300ft Vertical) | Avian specialists observed an adult incubating a single egg during construction activities. No agitated behavior was observed. | The nest was reported as inactive when no activity was observed at the nest and no eggs or chicks were present. |
| 2597 | 1065 | Northern Mockingbird | Approved for Assembly/Erection (Ground: 110ft) and air crane activities (Ground: 110ft; Helicopter: 150ft Horizontal, 300ft Vertical) | Avian Specialists observed the adult incubating and then feeding chicks throughout construction activities. No agitated behavior was reported. | When an Avian Specialist checked the nest a day after feeding was observed, he found the nest empty and no activity in the vicinity. The nest was reported as failed and listed the likely cause as predation. |
| 2580 | 1066 | Rock Wren | Approved for Assembly/Erection and air crane activities (Ground: 15ft; Helicopter: 0ft Horizontal, 140ft Vertical) | Initial observations by Avian Specialists included adults going into and out of a rock cavity but no eggs or chicks were observed. The nest was observed the entire day of air crane operations. | During all day observations by Avian Specialists the nest was determined to be inactive prior to construction activities. |
| 2521 | 1067 | Common Raven | The buffer reduction was originally denied with a smaller buffer reduction request but then later approved with a larger buffer for Assembly/Erection with an air crane (Ground: 30ft; Helicopter: 100ft Horizontal, 300ft Vertical). A reduction was also approved for wire stringing activities (Ground: 30ft; Helicopter: 75ft Horizontal, 300ft Vertical) | Avian Specialists observed the adult incubating and then feeding chicks throughout construction activities. No agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2705 | 1069 | Mourning Dove | Approved for wire stringing activities (Ground: 40ft; Helicopter: 40ft Horizontal, 170ft Vertical) | Avian Specialists observed the adult incubating the nest during construction activities. No agitated behavior was observed at that time. | During construction activities three days after observing incubating adults, Avian Specialists checked the nest and no eggs or chicks were present. It was noted that the nest was possibly depredated. The cause of the nest failure was reported as unknown and not project related. |
| 2212 | 1070 | Red-tailed Hawk | Buffer reduction was denied due to small buffer requested for helicopter activities. | No activity occurred within the original 300ft buffer. | During continuous observations of the nest it was determined by an Avian Specialists that the pair abandoned the nest during nest building activities. |
| 2712 | 1070 | Northern Mockingbird | Approved for wire stringing activities (Helicopter: 120ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | Prior to wire stringing activities an Avian Specialists checked on the nest where adults were feeding chicks. The specialist did not observe any chicks in the nest and it was too early for fledging. It was determined the nest was depredated. |
| 2394 | 1071 | Bushtit | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 75ft) | The nest was determined inactive prior to construction activities. | Prior to construction activities an Avian Specialist observed no activity at the nest that, during prior visits, was being built by the adults. No bushtits were in the area so the nest was determined inactive. |
| 2642-R1 | 1071 | Greater Roadrunner | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 130ft) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2673 | 1071 | Common Raven | Approved for wire stringing activities (Ground: 0ft; Helicopter: 5ft Horizontal, 40ft Vertical) | The nest was determined inactive prior to construction activities. | Prior to construction activities an Avian Specialist observed no activity at the nest that, during prior visits, was being built by the adults. It was determined the adults moved to complete a nest near Tower 1073. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2350 | 1073 | Common Raven | A buffer was originally approved for 75ft ground buffer for Assembly/Erection then later requested and approved for 25ft | During and after construction activities the adults were observed incubating the nest. No agitated behavior was reported. | The nest was determined to have failed over a month after construction had left the area. No activity was observed near the nest. The cause of failure was reported as unknown and non-project related. |
| 2721 | 1073 | Common Raven | Approved for wire stringing activities (Ground: 50ft; Helicopter: 50ft Horizontal, 300ft Vertical) | During construction activities Avian Specialists observed the nest from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2377 | 1075 | Common Raven | Approved for Tower Assembly/Erection (Ground: 35ft), wire stringing activities (Ground: 35ft; Helicopter: 35ft Horizontal, 300ft Vertical), staking, BMP installation, vegetation clearing and grading activities (Ground: 85ft) | During construction activities Avian Specialists observed the nest from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2459 | 1075 | Rock Wren | Approved for Assembly/Erection activities (Ground: 20ft) | During construction activities no agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2391 | 1078 | Red-tailed Hawk | Approved for equipment demobilization (Ground: 65ft) and staking, BMP installation, vegetation clearing and grading activities (Ground: 120ft) | No agitated behavior was observed during equipment demobilization. The nest was reported inactive prior to subsequent construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2634 | 1078 | House Finch | Approved for wire stringing (Ground: 30ft; Helicopter: 30ft Horizontal, 300ft Vertical), guard pole installation, staking, BMP installation, vegetation clearing, and grading activities (Ground: 30ft). | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2637-R1 | 1078 | Cassin's Kingbird | Approved for wire stringing activities (Ground: 80ft; Helicopter: 100ft Horizontal, 300ft Vertical). | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2728 | 1078 | House Finch | Approved for wire stringing activities (Ground: 45ft; Helicopter: 45ft Horizontal, 300ft Vertical) and guard pole installation (Ground: 45ft). | Initial observations by Avian Specialists were of adults building the nest but during subsequent visits there was no activity. | No activity was observed at the nest after the initial observation of nest building was reported. The nest was reported as inactive by Avian Specialists. |
| 2749 | 1078 | Western Kingbird | Approved for wire stringing activities (Ground: 70ft; Helicopter: 70ft Horizontal, 300ft Vertical) and guard pole installation (Ground: 100ft). | Prior to construction activity in the reduced buffer the nest was determined inactive | The nest was determined failed with causes being non-project related. The initial observation was of nest building and Avian Specialists believed Cassin's kingbirds in the same tree may have chased the birds away. |
| 2750 | 1079 | House Finch | Approved for wire stringing activities (Ground: 239ft; Helicopter: 30ft Horizontal, 300ft Vertical) | The nest was determined inactive during the initiation of wire stringing activities | The Avian Specialists assigned to observe the nest during wire stringing activities did not observe any activity at the nest for two days in a row. The nest was reported as inactive. |
| 2753 | 1080 | Greater Roadrunner | Approved for wire stringing activities (Ground: 70ft; Helicopter: 10ft Horizontal, 110ft Vertical) | Throughout construction activities Avian Specialists observed the nest from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2451 | 1084 | Common Raven | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 30ft). | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2763 | 1084 | Blue Grosbeak | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 148ft), guard pole installation/removal and wire stringing (Ground: 30ft; Helicopter: 65ft Horizontal, 150ft Vertical) | Throughout construction activities Avian Specialists observed the nest from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2452 | 1085 | Common Raven | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 200ft), and wire stringing activities (Ground: 70ft; Helicopter: 70ft Horizontal, 300ft Vertical) | The nest was determined inactive during the initiation of wire stringing activities | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2754 | 1087 | Greater Roadrunner | Approved for wire stringing activities (Ground: 90ft; Helicopter: 90ft Horizontal, 300ft Vertical) | The nest was determined inactive during the initiation of wire stringing activities | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2755 | 1087 | Blue Grosbeak | Approved for wire stringing activities (Ground: 90ft; Helicopter: 90ft Horizontal, 300ft Vertical) | Avian Specialists observed the adults feeding chicks throughout construction activities and reported no agitated or stressed behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2336 | 1088 | Common Raven | The buffer reduction was denied as it was determined the request would pose too great a risk to the success of the nest. | No construction activities occurred within the original 300ft buffer. | The Avian Specialist reported the raven nest failed as a pair of red-tailed hawks was observed tending to the nest. |
| 2487 | 1088 | Red-tailed Hawk | Approved for staking, BMP installation, and vegetation clearing, and grading activities (Ground: 130ft). The buffer reduction was denied for wire stringing activities. | The nest was monitored continuously until it fledged. No wire stringing activities occurred within 300ft of the nest. | The nest was reported by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2676 | 1089 | Common Raven | Approved for wire stringing activities (Ground: 70ft; Helicopter: 70ft Horizontal, 300ft Vertical) | Avian Specialists observed the adults incubating then feeding chicks throughout construction activities and reported no agitated or stressed behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2361 | 1090 | Red-tailed Hawk | The buffer reduction was denied as it was determined the request would pose too great a risk to the success of the nestlings fledging. | Avian Specialists observed the nest from incubation through fledging. No construction took place within the original 300ft buffer. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2430 | 1090 | Bushtit | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 150ft) | Prior to construction activity in the reduced buffer the nest was determined inactive | Initial observations were of nest building. Three weeks later there was no activity observed at the nest and the Avian Specialist reported it as inactive. |
| 2756 | 1090 | Cassin's Kingbird | Approved for wire stringing activities (Ground: 81ft, Helicopter: 81ft Horizontal, 300ft Vertical) | The nest was monitored by Avian Specialists during construction activities in the area. No agitated behavior was reported. | Initial observations of the nest were indeterminate on what stage the nest was in due to its location. The Avian Specialist who determined it inactive believed the adults may have abandoned the nest for another. |
| 2757 | 1090 | Western Kingbird | Approved for wire stringing activities (Ground: 85ft, Helicopter: 85ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The initial observations of this nest were of nest building. The Avian Specialist who determined it inactive believed the adults may have abandoned the nest for another. |
| 2758 | 1090 | Mourning Dove | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 140ft), and wire stringing activities (Ground: 140ft; Helicopter: 140ft Horizontal, 300ft Vertical) | The nest was determined inactive during the initiation of wire stringing activities | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2759 | 1090 | Lesser Goldfinch | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 200ft), and wire stringing activities (Ground: 200ft; Helicopter: 200ft Horizontal, 300ft Vertical) and traffic control (Ground: 20ft) | Avian Specialists observed the nest from incubation through fledging during construction activities. No agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged. One chick was a Lesser Goldfinch; the other two were Brown-headed Cowbirds. |
| 2353 | 1091 | Common Raven | Approved for Assembly/Erection activities (Ground: 25ft) | The ravens were observed to continually bring nesting material to the nest throughout construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2576 | 1092 | Bushtit | Approved for pilecap and rebar installation, tower leg assembly (Ground: 25ft; Helicopter: 20ft Horizontal, 300ft Vertical) and Air Crane or Kmax assembly activities (Ground: 25ft; Helicopter: 50ft Horizontal, 300ft Vertical) | The nest was determined inactive during the pilecap activities. | The nest was reported to have failed during pilecap installation with the cause reported as non-project related. It was stated that the nest was destroyed and believed to have been depredated. Earlier observations during construction activities twelve days prior were of nest building. |
| 2577 | 1092 | Blue Gray Gnatcatcher | Approved for pilecap and rebar installation, tower leg assembly (Ground: 170ft; Helicopter: 170ft Horizontal, 300ft Vertical) and Air Crane or Kmax assembly activities (Ground: 170ft; Helicopter: 185ft Horizontal, 300ft Vertical) | The nest was continually monitored throughout construction activities from nest building through incubation. No agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2629 | 1092 | Bushtit | Approved for pilecap and rebar installation, tower leg assembly, and Air Crane or Kmax assembly activities (Ground: 45ft; Helicopter: 45ft Horizontal, 300ft Vertical) | Avian Specialists observed the nest throughout construction activities from incubation through fledging. | The nest was reported by an Avian Specialist to have successfully fledged prior to air crane activities. |
| 2370 | 1093 | Common Raven | The reduced buffer was originally accepted at 90ft for assembly/ erection activities and then further reduced to 30ft. | Avian specialists observed the adults bringing nesting material to the nest during construction activities. No agitated behavior was reported. | The outcome of the nest was reported as unknown. Continuous observations of the nest were stopped after construction left the area. Avian Specialists could not determine if the nest fledged or failed. |
| 2387 | 1094 | Anna's Hummingbird | Approved for tower assembly and erection activities (Ground: 270ft) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2541 | 1094 | House Finch | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 175ft) | The nest was determined inactive prior to construction activities. | The outcome of the nest was reported as failed with causes listed as non-project related. The nest was in tatters and the Avian Specialist believed the nest was depredated. |
| 2614 | 1094 | Bewick's Wren | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 116ft) | The nest was determined inactive prior to construction activities. | The nest was not continuously monitored prior to it being determined inactive. The Avian Specialist gave no indication as to what may have happened to the nest. The nest was in a rock cavity and they were unable to see its contents. |
| 2615 | 1094 | California Towhee | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 195ft) | The nest was determined inactive prior to construction activities. | The nest was not continuously monitored prior to it being determined inactive. The Avian Specialist did not observe any eggs or chicks in the nest. Previous observations were of adults incubating. |
| 2620 | 1094 | Anna's Hummingbird | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 250ft) | The nest was determined inactive prior to construction activities. | The nest was not continuously monitored prior to it being determined inactive and the outcome was reported as unknown. The Avian Specialist stated the nest was gone. Previous observations were of adults feeding chicks. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2621 | 1094 | Lark Sparrow | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 210ft) | The nest was determined inactive prior to construction activities. | The outcome of the nest was reported as failed with causes listed as non-project related. The nest was in tatters and the Avian Specialist believed the nest was depredated. |
| 2622 | 1094 | California Towhee | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 95ft) | The nest was determined inactive prior to construction activities. | The outcome of the nest was reported as failed with causes listed as non-project related. The nest was in tatters and the Avian Specialist believed the nest was depredated. |
| 2623 | 1094 | Lesser Goldfinch | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 175ft) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2217 | 1094 | Red-tailed Hawk | Approved for tower assembly (Ground: 25ft), then amended to include helicopters (Ground: 25ft; Helicopter: 75ft Horizontal, 300ft Vertical) and staking, BMP installation, vegetation clearing, and grading activities (Ground: 200ft). The buffer reduction request for wire stringing activities was denied due to the nestlings being close to fledging. | The Avian Specialists continued to observe this nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | Avian Specialists reported two chicks successfully fledged. A third chick went missing and was never found, the fourth chick was seen dead in the nest. |
| 2761 | 1094 | House Finch | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 190ft), and wire stringing activities (Ground: 45ft; Helicopter: 45ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was determined inactive by Avian Specialists when no activity was observed at the nest over two consecutive days. The previous observation was of nest building activity. |
| 2765 | 1094 | Lesser Goldfinch | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 200ft), and wire stringing activities (Ground: 187ft; Helicopter: 187ft Horizontal, 300ft Vertical) | The nest was determined inactive at the initiation of wire stringing activities. No agitated behavior was reported. | The nest was reported by the Avian Specialist to have successfully fledged. |
| 2777 | 1094 | Mourning Dove | Approved for wire stringing activities (Ground: 166ft; Helicopter: 166ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The outcome of the nest was reported as failed with causes reported as non-project related. The Avian Specialist believed this nest was depredated. |
| 2414 | 1097 | Common Raven | Approved for tower assembly and erection activities (Ground: 30ft) | The Avian Specialists continued to observe this nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2767 | 1097 | Mourning Dove | Approved for wire stringing activities (Ground: 60ft; Helicopter: 25ft Horizontal, 210ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was determined inactive by Avian Specialists when no activity was observed at the nest over two consecutive days. The previous observation was of nest building activity. |
| 2778 | 1097 | Lark Sparrow | Approved for wire stringing activities (Ground: 155ft; Helicopter: 155ft Horizontal, 300ft Vertical) | The Avian Specialists continued to observe this nest throughout construction activities from incubation through fledging. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2210 | 1099 | Red-tailed Hawk | Approved for tower assembly and erection activities (Ground: 50ft) | The Avian Specialists observed the nest throughout construction activities and no agitated behavior was reported. | The nest was periodically checked after construction activities ceased at the site. Nest building and incubation was observed then no activity. The nest was reported as inactive with an unknown outcome. |
| 2563 | 1101 | Common Raven | Approved for mobilization on Micropile equipment, tower leg transport (Ground: 28ft; Helicopter: 50ft Horizontal, 300ft Vertical) and wire stringing activities (Ground: 65ft; Helicopter: 65ft Horizontal, 300ft Vertical) | The Avian Specialists monitored the nest throughout construction activities. No agitated behavior was observed. The nest fledged prior to wire stringing activities. | The nest was reported by an Avian Specialist to have successfully fledged prior to wire stringing activities. |
| 2584 | 1101 | Lesser Goldfinch | Approved for continued use of Kmax Helicopters and tower picks (Ground: 20ft; Helicopter: 20ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest throughout construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have failed with causes being non-project related. There were no eggs or chicks present in the nest and western scrub jays were seen taking eggs out of nests in the area. |
| 2660 | 1101 | House Finch | The buffer reduction was denied as the size of the buffer posed too great a risk to the nest. | No construction activity occurred within the original 300ft buffer. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2744 | 1101 | Phainopepla | Approved for wire stringing activities (Ground: 80ft; Helicopter: 50ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest throughout construction activities from incubation through fledging and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2768 | 1101 | Phainopepla | Approved for wire stringing activities (Ground: 193ft; Helicopter: 193ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest throughout construction activities through fledging and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2729 | 1102 | Phainopepla | The buffer reduction request was denied due to the request being too small and posing too great a risk to the near fledging chicks. | No construction activity occurred within the original 300ft buffer. | The nest was reported to have failed by non-project related causes. The timeline left it unlikely that the chicks fledged. The Avian Specialist believed it was likely predated by nearby ravens seen at the time of the observation. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2445 | 1103 | California Towhee | Approved for continued ingress/egress (Ground: 35ft) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2501 | 1103 | Common Raven | Approved for grouting and testing helicopter activities (Ground: 40ft; Helicopter: 65ft Horizontal, 300ft Vertical) and Tower Assembly with Air Crane (Ground: 110ft; Helicopter: 75ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest throughout construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2231 | 1107 | Red-tailed Hawk | The buffer reduction was originally denied as the planned activities posed to great a risk to the continued use of the nest by the Hawks. Revisions were made and the new request for Micropile activities and tower assembly were approved (Ground: 125ft; Helicopter: 125ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest from incubation through fledging during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2433 | 1108 | Common Raven | Approved for Micropile foundation work and Tower Assembly/ Erection (Ground: 100ft; Helicopter: 75ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest from incubation through fledging during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2401 | 1109 | Common Raven | Approved for Micropile foundation work (Ground: 50ft; Helicopter: 85ft Horizontal, 300ft Vertical) | The ravens were observed to continually bring nesting material to the nest throughout construction activities. | The nest was determined to be inactive after several observations of no activity at the nest. The Ravens appeared to have moved to a new nest on the opposite side of the tower bridge |
| 2419 | 1109 | Common Raven | Approved for Micropile foundation work, tower assembly/ erection (Ground: 50ft; Helicopter: 85ft Horizontal, 300ft Vertical) and BMP maintenance and repair (Ground: 50ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2602 | 1113 | Common Raven | Approved for tower assembly/erection including Air Crane (Ground: 55ft; Helicopter: 75ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined inactive by Avian Specialists when no activity was observed at the nest over several consecutive days. Previous observations had the ravens visiting the nest several days after construction completed at the site. No eggs or chicks were observed. |
| 2415 | 1114 | Red-tailed Hawk | Approved for tower assembly/erection (Ground: 60ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2583 | 1114 | Western Kingbird | Approved for tower assembly/erection (Ground: 70ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2619 | 1114 | House Finch | Approved for tower assembly/erection (Ground: 55ft) | The nest was determined inactive prior to construction activities. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2650 | 1114 | Cassin's Kingbird | Approved for tower assembly/erection (Ground: 40ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2651 | 1114 | House Finch | Approved for tower assembly/erection (Ground: 20ft) | The nest was determined inactive prior to construction activities. | The nest was reported as inactive prior to construction activities. The previous observation was of nest building. |
| 2311 | 1117 | Red-tailed Hawk | Approved for materials delivery and tower assembly/erection (Ground: 25ft) | The adults were observed at the nest during material delivery. The adults had left the nest prior to assembly/ erection activities. | The nest was reported as failed by non-project related causes. Suspected reasons for failure were not reported by the Avian Specialists. Previous observations were of incubation. |
| 2661 | 1117 | Western Kingbird | Approved for QA/QC activities (Ground: 50ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported as inactive several weeks after the construction activity completed and after several days of no activity at the nest. |
| 2553 | 1118 | Common Raven | Approved for tower assembly/erection (Ground: 30ft) and helicopter picks (Ground: 30ft; Helicopter: 60ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by the Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2644 | 1118 | Western Kingbird | Approved for continued helicopter activities at HLZ H9 (Ground: 200ft; Helicopter: 100ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported by Avian Specialists as inactive. The previous observation of the nest was of nest building. |
| 2411 | 1120 | Red-tailed Hawk | Approved for tower assembly/erection (Ground: 30ft) | At the start of construction activities, no activity was reported at the nest. After two additional visits, the nest was considered inactive. | The nest was reported by Avian Specialists as inactive. The previous observation of the nest was of nest building. |
| 2556 | 1121 | Common Raven | Approved for tower assembly/erection (Ground: 37ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2511 | 1123 | House Finch | Approved for tower assembly/erection (Ground: 30ft) | At the start of construction activities, no activity was reported at the nest. After three additional visits, the nest was considered inactive. | The nest was reported by Avian Specialists as inactive. The previous observation of the nest was of nest building. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2645 | 1123 | Canyon Wren | Approved for tower assembly/erection (Ground: 60ft) | The Avian Specialists observed the adults feeding chicks during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2646 | 1124 | California Towhee | Approved for tower assembly/erection (Ground: 150ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2512 | 1127 | House Finch | Approved for tower assembly/erection (Ground: 83ft) | The nest was determined inactive prior to construction activities. | The nest was reported by Avian Specialists as inactive. The previous observation of the nest was of nest building. |
| 2551 | 1127 | Mourning Dove | Approved for tower assembly/erection (Ground: 60ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by Avian Specialists as failed by non-project-related causes. The nest was believed to be predated by ravens nesting in the area. |
| 2611 | 1127 | Common Raven | Approved for tower assembly/erection (Ground: 26ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | Initial observations at the start of construction were of ravens incubating the nest. Several subsequent observations showed no activity at the nest and the nest was no longer in the tower. The nest was reported as failed by non-project-related causes. |
| 2612 | 1127 | Blue-gray Gnatcatcher | Approved for tower assembly/erection (Ground: 131ft) | The Avian Specialists observed the adults incubating the nest during construction activities and no agitated behavior was reported. | After construction ceased at the site a subsequent visit was made and there was no activity at the nest nor eggs or chicks. The nest was determined inactive with the outcome listed as unknown. |
| 2591 | 1128 | Red-tailed Hawk | Approved for tower assembly/erection (Ground: 20ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2648-R1 | 1128 | House Finch | Approved for tower assembly/erection (Ground: 15ft) and wire stringing activities (Ground: 25ft; Helicopter: 25ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by the Avian Specialists to have successfully fledged two clutches. |
| 2663 | 1128 | California Towhee | Approved for tower assembly/erection (Ground: 68ft) | The nest was determined inactive prior to construction activities. | The initial observations of this nest were incubation. A subsequent visit showed no activity at the nest nor any eggs or chicks. The nest was determined inactive with the outcome listed as unknown. |
| 2666 | 1128 | House Finch | Approved for tower assembly/erection (Ground: 60ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2681 | 1128 | Mourning Dove | Approved for tower assembly/erection (Ground: 90ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2748 | 1128 | House Finch | Approved for tower assembly/erection (Ground: 30ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged during construction activities. |
| 2775 | 1128 | House Finch | Approved for tower assembly/erection (Ground: 30ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined to have failed during construction activities at the site when the Avian Specialist observed no activity at the nest and the previous observation was of incubation. It was reported as non-project related. |
| 2220 | 1129 | Common Raven | Approved for tower assembly/erection (Ground: 25ft) | The nest was determined inactive prior to construction activities. | Initial observations of the nest were of nest building activities. Red-tailed hawks were seen perched on the tower and several days of no raven activity led the Avian Specialists to determine the nest was inactive. |
| 2683 | 1129 | Mourning Dove | Approved for resistance testing (Ground: 52ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2684 | 1129 | Mourning Dove | Approved for resistance testing (Ground: 50ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2685-R1 | 1129 | California Towhee | Approved for resistance testing (Ground: 215ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2686 | 1129 | Common Raven | Approved for counterpoise/ grounding activities (Ground: 35ft) and wire stringing activities (Ground: 40ft, Helicopter: 50ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2326 | 1131 | Anna's Hummingbird | Approved for tower assembly/erection (Ground: 150ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2096 | 1132 | Red-tailed Hawk | Approved for tower assembly/ erection (Ground: 40ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2801 | 1132 | Western Kingbird | Approved for wire stringing activities (Ground: 41ft; Helicopter: 75ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2355 | 1133 | Common Raven | Approved for tower assembly/ erection (Ground: 60ft), Denied for wire stringing activities | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported, only nest building at the time of assembly/ erection. | The nest was determined by an Avian Specialist to have successfully fledged after tower assembly/ erection activities ceased in the area. |
| 2805 | 1134 | Northern Mockingbird | Approved for Guard Pole Installation (Ground: 40ft) and Wire Stringing Activities (Ground: 85ft; Helicopter: 30ft Horizontal, 300ft Vertical) | Avian Specialists reported observing the nest from incubation through feeding throughout construction activities. No agitated behavior was observed. | Avian Specialists reported that the nest successfully fledged. |
| 2097 | 1134 | Red-tailed Hawk | Approved by CDFW for ground buffer reduction of 80ft on 12/28/12. SCE stated no additional buffer reduction was needed from CPUC as CDFW buffer was still valid. | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged after tower assembly/ erection activities ceased in the area. |
| 2505 | 1143 | Red-tailed Hawk | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 250ft) | The nest was determined inactive prior to construction activities. | The Avian Specialists determined the nest inactive with the nest likely to have fledged successfully. The nest was not monitored continually after construction activities ceased in the area. |
| 2808 | 1145 | Mourning Dove | Approved for Guard Pole Installation and Wire Stringing Activities (Ground: 200ft; Helicopter: 40ft Horizontal, 300ft Vertical) | Avian Specialists reported observing the adult birds feeding nestlings throughout construction activities. No agitated behavior was observed. | Avian Specialists reported that two of the nestlings successfully fledged and one unhatched egg was found. |
| 2460 | 1145 | California Towhee | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 140ft) | The nest was determined inactive prior to construction activities. | The nest was not observed for a month after an initial observation of incubation. The Avian Specialist doing the final check reported the nest as failed with the cause being non-project related but indicated the nest may have fledged due to the timeframe. |
| 2743 | 1145 | Phainopepla | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 180ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not continuously monitored after construction ceased in the area but was determined by an Avian Specialist to have fledged due to the timeframe. |
| 2329 | 1146 | Common Raven | Approved for tower assembly/ erection (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged after tower assembly/ erection activities ceased in the area. |
| 2809 | 1147 | Mourning Dove | Approved for Wire Stringing Activities (Ground: 50ft; Helicopter: 50ft Horizontal, 300ft Vertical) | Avian Specialists reported observing the adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was reported. | Avian Specialists reported that the nest successfully fledged. |
| 2810 | 1147 | Northern Mockingbird | Approved for Wire Stringing Activities (Ground: 20ft; Helicopter: 300ft Horizontal, 120ft Vertical) | Avian Specialists reported observing the adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was reported. | Avian Specialists reported that the nest successfully fledged. |
| 2474 | 1147 | Killdeer | Approved for tower assembly/ erection (Ground: 200ft) | The nest was determined inactive prior to construction activities. | The initial observation was of two eggs in the nest. A subsequent visit revealed no eggs in the nest and the Avian Specialist reported the nest failed by non-project related causes. |
| 2476 | 1147 | Mourning Dove | Approved for tower assembly/ erection (Ground: 50ft) | The nest was determined inactive prior to construction activities. | The initial observation was of the adult incubating two eggs. Subsequent visits by an Avian Specialist revealed no eggs in the nest and determined the nest failed with causes listed as non-project related. |
| 2503 | 1147 | Northern Mockingbird | Approved for tower assembly/ erection (Ground: 25ft) | The nest was determined inactive prior to construction activities. | The initial observation was of the adult incubating one egg. A subsequent visit revealed egg fragments on the ground and the Avian Specialist determined the nest failed by non-project related causes. The likely cause was reported as depredation. |
| 2362 | 1149 | Red-tailed Hawk | Approved for material delivery and tower assembly/ erection (Ground: 30ft) | The nest was determined inactive at the start of construction activities. | The initial observations were of the adult incubating the nest. Subsequent visits showed no activity at the nest. The Avian Specialist determined the nest inactive with causes unknown. |
| 2800 | 1150 | Cassin's Kingbird | Approved for Guard Pole Installation and Wire Stringing Activities (Ground: 40ft; Helicopter: 65ft Horizontal, 300ft Vertical) | Avian Specialists reported adults feeding the nestlings throughout the construction period. No agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2456 | 1151 | Common Raven | Approved for material delivery and tower assembly/ erection (Ground: 25ft) and for staking, BMP installation, vegetation clearing, and grading activities (Ground: 200ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2522 | 1152 | Cassin's Kingbird | Approved for tower assembly/ erection (Ground: 60ft) and for staking, BMP installation, vegetation clearing, and grading activities (Ground: 25ft) | The nest was determined inactive at the start of construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2529 | 1154 | Common Raven | Approved for tower assembly/ erection (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not continually monitored after construction activities ceased at the site. Two weeks after incubation was observed the avian specialist observed no activity at the site and determined the nest inactive. |
| 2358 | 1155 | Common Raven | Approved for material delivery and tower assembly/ erection (Ground: 30ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not continually monitored after construction activities ceased at the site. Two weeks after incubation was observed avian specialists observed no activity at the site and determined the nest inactive. |
| 2568 | 2003 | Common Raven | Approved for OPGW replacement (Ground: 60ft; Helicopter: 60ft Horizontal, 300ft Vertical) and telecomm splicing (Ground: 60ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | Incubation activities were observed during construction activities. Once construction was complete subsequent observations showed no activity at the nest. The avian specialist determined the nest inactive stating the ravens may have abandoned the nest. |
| 2567 | 2006 | Common Raven | Approved for OPGW repair activities (Ground: 0ft Horizontal, 99ft Vertical) and includes a 12-foot globular buffer around the nest. | The nest was determined inactive at the start of construction activities. | At the commencement of construction activities no activity was observed at the nest. Previous observations were of nest building. A crew member in a crane was able to see in the nest that no eggs or chicks were present. The nest was determined to be inactive. |
| 2324 | 2010 | Common Raven | Approved for QA/QC activities (Ground: 50ft) and OPGW work (Ground: 50ft; Helicopter: 50ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2449 | 2013 | Common Raven | Approved for OPGW repair activities and telecomm splicing (Ground: 0ft Horizontal, 140ft Vertical; Helicopter: 0ft Horizontal, 140ft Vertical) and CVFTL Fence removal (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2325 | 2018 | Red-tailed Hawk | Approved for site stabilization, QA/QC, and CVFTL Fence removal (Ground: 30ft) | The Avian Specialists observed the adults incubating during construction activities and no agitated behavior was reported. | Once construction activities ceased in the area the nest was not continually observed. One month after construction activities ceased, the nest was determined inactive with the outcome listed as unknown. |
| 2581 | 2020 | Common Raven | Approved for CVFTL Fence removal (Ground: 30ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2356 | 2113 | Common Raven | Approved for site stabilization (Ground: 130ft) and CVFTL Fence removal (Ground: 115ft) | The nest was determined inactive at the start of construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2344 | 2119 | Common Raven | Approved for site stabilization (Ground: 260ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by the Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2219 | 2121 | Red-tailed Hawk | Approved for fiber pulling by bucket trucks and stabilization activities (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by the Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2299 | 2125 | Red-tailed Hawk | Approved for site stabilization (Ground: 15ft) | The Avian Specialists observed nest building during construction activities and no agitated behavior was reported. | The nest was determined inactive. Avian Specialists observed ravens had taken over the nest and began nest building. |
| 2489 | 2125 | Common Raven | Approved for CVFTL Fence removal (Ground: 15ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2331 | 2130 | Common Raven | Approved for fiber/static & stub road repair (Ground: 25ft) | The Avian Specialists observed nest building during construction activities and no agitated behavior was reported. | The nest became inactive when the pair moved to an adjacent tower to nest. |
| 2726 | 2130 | Verdin | Approved for CVFTL Fence removal (Ground: 95ft) | The nest was determined inactive prior to the start of construction activities. | The initial observation was of nest building. All subsequent observations by Avian Specialists showed no activity at the nest so it was determined inactive. |
| 2371 | 2131 | Common Raven | Approved for site stabilization (Ground: 0ft) and CVFTL Fence removal (Ground: 20ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2610 | 2201 | Common Raven | Approved for CVFTL Fence removal (Ground: 65ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2408 | 2204 | Common Raven | Approved for site stabilization (Ground: 100ft), telecomm splicing (Ground: 100ft) and CVFTL Fence removal (Ground: 100ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2369 | 2211 | Common Raven | Approved for CVFTL Fence removal (Ground: 88ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2230 | 2214 | Costa's Hummingbird | Approved for wire stringing activities (Ground: 50ft; Helicopter: 100ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2496 | 2215 | Red-tailed Hawk | Approved for OPGW splicing (Ground: 165ft) | Avian Specialists were onsite during construction activities although no hawks had been seen since the initial observation. | The initial observation was of nest building and territorial displays. Subsequent visits showed no activity at the site and the nest was determined to be inactive. |
| 2237 | 2226 | Common Raven | Approved for wire stringing activities (Ground: 25ft; Helicopter: None approved) | The Avian Specialists observed the nest during construction activities. Nest building was the initial observation then no activity. | Ravens were observed bringing nesting material to the site prior to construction activities. Once construction activities began, the ravens were no longer seen at the nest but remained in the area. The nest was determined inactive after several "no activity" observations. |
| 2318 | 2229 | Common Raven | Approved for Site Stabilization (Ground: 25ft) and Telecomm Splicing (Ground: 70ft) | Avian specialists observed the ravens incubating the nest during construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest had fledged. |
| 2490 | 2233 | Common Raven | Approved for site stabilization activities (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2225 | 2235 | Red-tailed Hawk | Approved for Wire Stringing activities (Ground: 220ft; Helicopter: 220 Horizontal, 300 Vertical) | Avian Specialist observed adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest had fledged. |
| 2259 | 2238 | Common Raven | Approved for wire stringing activities (Ground: 165ft; Helicopter: 150ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities. Nest building was observed then no activity at the site. | The initial observation was of nest building. Subsequent visits showed no activity at the site and the nest was determined to be inactive. |
| 2223 | 2239 | Common Raven | Approved for tower assembly/erection and wire stringing activities (Ground: 180ft; Helicopter: 180ft Horizontal, 300ft Vertical) | The nest was determined inactive prior to the start of construction activities. | The nest was determined inactive when Avian Specialists observed the pair nesting on an adjacent tower. |
| 2497 | 2240 | Common Raven | Approved for site stabilization (Ground: 212ft), telecomm splicing (Ground: 200ft) and CVFTL Fence removal (Ground: 212ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2530 | 2244 | House Finch | Approved for site stabilization activities (Ground: 118ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2481 | 2245 | Common Raven | Approved for Site Stabilization (Ground: 0ft Horizontal, 100ft Vertical) and QA/QC Activities (Ground: 0ft Horizontal, 25ft Vertical) | Avian Specialist observed adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest had fledged. |
| 2442 | 2247 | Common Raven | Approved for site stabilization activities (Ground: 14ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2335 | 2249 | Greater Roadrunner | Approved for wire stringing activities (Ground: 300ft; Helicopter: 140ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2562 | 2251 | Black-tailed Gnatcatcher | Approved for site stabilization activities (Ground: 127ft) | The nest was determined inactive prior to the start of construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2546 | 2256 | Common Raven | Approved for site stabilization activities (Ground: 213ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2547 | 2260 | Common Raven | Approved for Site Stabilization Activities (Ground: 19ft) | Avian Specialist observed adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest had fledged. |
| 2345 | 2260 | Costa's Hummingbird | Approved for wire stringing activities (Ground: 160ft; Helicopter: 160ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2532 | 2261 | Black-throated Sparrow | Approved for site stabilization activities (Ground: 99ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2586 | 2268 | Common Raven | Approved for QA/QC activity (Ground: 0ft Horizontal, 20ft Vertical) and site stabilization activities (Ground: 0ft Horizontal, 150ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2528 | 2301 | House Finch | Approved for site stabilization activities (Ground: 130ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2536 | 2304 | House Finch | Approved for site stabilization activities (Ground: 105ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2560 | 2309 | Common Raven | Approved for site stabilization activities (Ground: 7ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2366 | 2313 | Phainopepla | Approved for continued access and helicopter activity at HLZ-H1E (Ground: 229ft; Helicopter: 229ft Horizontal, 150ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported although it was reported by the Avian Specialist to have moved away from the nest for most of the day. | The nest was reported as failed by non-project related causes. The nest was found below its original location with no eggs or chicks. Previous observations were of incubation. It was suspected to have failed due to depredation. |
| 2549 | 2313 | Cactus Wren | Approved for site stabilization activities (Ground: 158ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest a few weeks later and determined the nest was inactive. |
| 2552 | 2313 | House Finch | Approved for site stabilization activities (Ground: 216ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest a few weeks later and determined the nest was inactive. |
| 2418 | 2315 | Common Raven | Approved for wire stringing activities (Ground: 130ft Ground; Helicopter: 130ft Horizontal, 300ft Vertical) | The Avian Specialists observed the nest during construction activities. Nest building was observed by ravens and then Red-tailed hawks. Both pairs left the site during construction activities. | The nest was reported as failed after several observations of no activity at the nest with causes listed as non-project related. |
| 2616 | 2318 | Costa's Hummingbird | Approved for site stabilization activities (Ground: 127ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2585 | 2320 | Verdin | Approved for site stabilization activities (Ground: 245ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2572 | 2322 | Verdin | Approved for site stabilization activities (Ground: 105ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2574 | 2322 | House Finch | Approved for site stabilization activities (Ground: 60ft) | The nest was determined inactive prior to construction activities. | The nest was reported as failed. Avian Specialists observed ravens taking the chicks from the nest. |
| 2639 | 2323 | House Finch | Approved for site stabilization activities (Ground: 70ft) | The Avian Specialists observed the nest during construction activities although no activity had been seen at the nest since the initial observation of nest building. | The nest was reported as inactive by Avian Specialists after several observations of no activity were made after the initial observation of nest building. |
| 2385 | 2324 | Verdin | Approved for wire stringing activities (Ground: 50ft; Helicopter: 50ft Horizontal, 100ft Vertical) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by the Avian Specialist to have successfully fledged after construction activities ceased in the area. |
| 2359 | 2328 | Common Raven | Approved for Site Stabilization Activities (Ground: 115ft) | Avian Specialist observed adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest had fledged. |
| 2360 | 2329 | Cactus Wren | Approved for site stabilization activities (Ground: 110ft) | The nest was determined inactive prior to construction activities. | The nest was determined by the Avian Specialist to have successfully fledged. |
| 2466-R1 | 2329 | Cactus Wren | Approved for site stabilization activities (Ground: 50ft) | The Avian Specialists observed the nest during construction activities although no activity had been seen at the nest since the initial observation of nest building. | The nest was reported as inactive by Avian Specialists after several observations of no activity. |
| 2643 | 2341 | Black-tailed Gnatcatcher | Approved for telecomm splicing (Ground: 75ft Horizontal, 20ft Vertical) | The nest was determined inactive prior to construction activities. | The nest was reported as failed with causes listed as non-project related. The previous observation a week prior was of incubation of 4 eggs. No suspected cause of failure was listed. |
| 2527-R2 | 2351 | Cactus Wren | Approved for telecomm splicing (Ground: 200ft Horizontal, 20ft Vertical) | The Avian Specialists observed the nest during construction activities although no activity had been seen at the nest since the initial observation of nest building. | The nest was reported as inactive by Avian Specialists after several observations of no activity. |
| 2595 | 2351 | Verdin | Approved for telecomm splicing (Ground: 112ft) | The nest was determined to have fledged the day construction activities began at the site. | The nest was determined by an Avian Specialist to have successfully fledged. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2378 | 2407 | Common Raven | Approved for site stabilization activities (Ground: 36ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2465 | 2410 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 95ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined inactive after construction activities ceased in the area. The previous observation was of incubation. The Avian Specialist could not confirm if eggs were laid in the nest due to its position in the tower. |
| 2508 | 2414 | Phainopepla | Approved for telecomm splicing (Ground: 165ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2509 | 2414 | Black-throated Sparrow | Approved for telecomm splicing (Ground: 25ft) | The nest was determined inactive prior to construction activities. | The nest was reported as inactive by Avian Specialists after several observations of no activity were made after the initial observation of nest building. |
| 2592 | 2414 | House Finch | Approved for telecomm splicing (Ground: 10ft Horizontal, 10ft Vertical) and site stabilization (Ground: 0ft Horizontal, 15ft Vertical) | The Avian Specialists observed to nest during splicing activities and observed mild stress. The nest was determined inactive prior to site stabilization activities. | The nest was determined inactive after telecomm splicing activities ceased in the area. The previous observation was of incubation although Avian Specialists could not confirm if eggs were laid in the nest due to its position in the tower. |
| 2641 | 2414 | Black-tailed Gnatcatcher | Approved for site stabilization activities (Ground: 250ft) | The nest was determined inactive prior to construction activities. | The nest was reported as failed with causes listed as non-project related. The Avian Specialist stated the nest was likely depredated. |
| 2664 | 2414 | Verdin | Approved for site stabilization and road grading activities (Ground: 8ft) | The Avian Specialist was onsite the day construction started at the site and determined the nest had failed. | The nest was reported as failed by non-project related causes. The Avian Specialist stated the nest was likely depredated. |
| 2564 | 2416 | House Finch | Approved for site stabilization activities (Ground: 5ft) | The Avian Specialists observed the nest during construction activities although no activity had been seen at the nest since the initial observation of nest building. | The nest was reported as inactive by Avian Specialists after several observations of no activity. |
| 2499 | 2419 | Phainopepla | Approved for site stabilization activities (Ground: 38ft) | The nest was determined inactive prior to construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2500 | 2419 | Common Raven | Approved for site stabilization activities (Ground: 5ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported on the first day but on the second day of construction a different Avian Specialist reported hearing agitated vocalizations. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2515 | 2421 | Verdin | Approved for site stabilization activities (Ground: 40ft) | The Avian Specialist was onsite the day construction started at the site and determined the nest inactive. | The nest was not monitored continuously prior to construction activities. Prior to work starting at the site the Avian Specialist determined the nest had likely fledged. |
| 2346 | 2453 | Common Raven | Approved for site stabilization activities (Ground: 67ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2351-R1 | 2455 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 100ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2400 | 2458 | Common Raven | Approved for Site Stabilization Activities (Ground: 68ft) | Avian Specialists observed adults incubating the nest during construction activities. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest outcome is unknown. |
| 2338 | 2458 | American Kestrel | The buffer reduction request was denied due to the highly agitated behavior of the birds. | No construction activities occurred within the original 300ft buffer | The nest was reported as inactive by Avian Specialists after several observations of no activity were made after the initial observation of nest building. |
| 2412 | 2507 | American Kestrel | Approved for QA/QC activities (Ground: 188ft) | The Avian Specialist monitored the nest at the start of construction and saw no activity at the nest. The previous observation was of nest incubation. | The Avian Specialist reported the nest as failed with causes listed as non-project related. It was stated in the report that the heat wave may have made the eggs inviable. |
| 2332 | 2515 | Red-tailed Hawk | Approved for QA/QC Activities (Ground: 40ft; Helicopter: 300ft Horizontal, 300ft Vertical) | Avian Specialists observed adults brooding and feeding the nestlings throughout construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Three months later an Avian Specialist reported the nest had fledged. |
| 2494 | 2528 | Red-tailed Hawk | Approved for spur road re-grading (Ground: 18ft) | The Avian Specialist monitored the nest at the start of construction and reported moderate agitation as the adult left the nest while crews were working at the site. It returned half an hour after the crew left. The adults were feeding chicks at the time of construction activities. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2337 | 2565 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 60ft) | The nest was determined inactive prior to construction activities. | The nest was reported as inactive by Avian Specialists after several observations of no activity. The previous activity observed was incubation. The outcome for the nest is unknown. |
| 2579 | 2567 | Red-tailed Hawk | Approved for site stabilization activities (Ground: 20ft) | No construction activities occurred after the nest buffer reduction was approved. | The nest was not monitored continuously after construction activities ceased in the area. Avian Specialists checked the nest over a month later and determined the nest was inactive. |
| 2216 | 2573 | Red-tailed Hawk | Approved for site stabilization activities (Ground: 15ft) | No construction activities occurred after the nest buffer reduction was approved. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2368 | 2576 | Red-tailed Hawk | Approved for QA/QC Activities (Ground: 90ft; Helicopter: 300ft Horizontal, 300ft Vertical) | Avian Specialists observed adults feeding nestlings. | After construction activities ceased in the area the nest was no longer monitored. Three months later an Avian Specialist reported the nest had fledged. |
| 2502 | 2601 | Common Raven | Approved for QA/QC Activities (Ground: 50ft) | Avian Specialists observed adults incubating the nest during construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored. Three months later an Avian Specialist reported the nest as inactive. |
| 2457 | 2606 | Red-tailed Hawk | Approved for QA/QC Activities (Ground: 75ft) | Avian Specialists observed adults incubating and then attending to chicks during construction activities. No agitated behavior was observed. | After construction activities ceased in the area the nest was no longer monitored although the nest was close to fledging at the last observation. Three months later an Avian Specialist reported the nest as inactive. |
| 2193 | 2639 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 50ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged although one chick was possibly blown out early by high winds. It was seen hiding in a creosote bush and being tended by adults. |
| 2221 | 2641 | Common Raven | Approved for QA/QC activities (Ground: 100ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2156-R1 | 2644 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 100ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2148-R1 | 2646 | Red-tailed Hawk | Approved for QA/QC activities (Ground: 75ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2653 | 2226X | Black-tailed Gnatcatcher | Approved for site stabilization activities (Ground: 230ft) | The nest was determined inactive prior to the start of construction activities. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2640 | 2326X | Black-throated Sparrow | Approved for site stabilization activities (Ground: 125ft) | The nest was determined inactive prior to construction activities. | The nest was reported as failed with causes listed as non-project related. The Avian Specialist did not remain at the site long enough to look for fledglings but believed due to the timeline that the nest did not fledge. |
| 2665 | Beaumont Yard | Say's Phoebe | Approved for continued ingress/egress and equipment/materials staging (Ground: 20ft) | The buffer was established during nest building observations and the nest was only partially built. No eggs or chicks were ever observed by Avian Specialists. | The nest was determined to have failed due to high winds blowing the nest out of the trailer it was located in. This observation was made the day after the nest was originally found. No eggs or chicks were present in the nest or vicinity. |
| 2538 | CR1-5E | Common Raven | Approved for Splicing Activities (Ground: 25ft) | Avian Specialists observed adults feeding nestlings. | After construction activities ceased in the area the nest was no longer monitored. Four months later an Avian Specialist reported the nest as inactive. |
| 2348 | Devers Substation | Common Raven | Approved for on-going substation activities (Ground: 25ft) | Avian Specialists observed the throughout construction activities from incubation through fledging. No agitated behavior was observed. | Avian Specialists reported the nest successfully fledged. |
| 2432 | HLZ-H2 | Cactus Wren | Approved for continued helicopter activities within HLZ (Ground: 75ft; Helicopter: 50ft Horizontal, 150ft Vertical) | The Avian Specialists continued to observe this nest throughout construction activities. No eggs or chicks were ever observed; the nest was believed to be a roost and not an active nest. | The nest was reported as inactive by Avian Specialists as the adults stopped going to the nest and began taking nesting material to a nearby nest. |
| 2710 | HLZ-H2A | Cactus Wren | Approved for continued helicopter activities (Ground: 100ft; Helicopter: 125 Horizontal, 300 Vertical) within HLZ and clearing/grading (Ground: 100ft) | Avian Specialists observed the nest throughout construction activities from nest building through fledging. No agitated behavior was observed. | The nest was reported by the Avian Specialist to have successfully fledged. |
| 2711 | HLZ-H2A | Cactus Wren | Approved for continued helicopter activities within HLZ (Ground: 180ft; Helicopter: 100ft Horizontal, 300ft Vertical) | Avian Specialists observed adults bringing nesting material to the nest during construction activities. No eggs or chicks were ever observed. | The nest was reported as inactive by Avian Specialists as the adults stopped going to the nest. |
| 2773 | HLZ-H2A | Northern Mockingbird | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 160ft) | Avian Specialists observed the adult incubating 3 eggs throughout construction activities. No agitated behavior was reported. | Avian Specialists observed no activity at the nest although 3 eggs were still present and due to nesting timeline should have hatched. The nest was reported as failed by non-project related causes. |

## Appendix 13. DPV2 Transmission Line Nest Buffer Reduction Requests for the 2013 Nesting Season

| FRED Nest ID | Tower No. | Species | Buffer Approval (Ground and Helicopter buffer distances) | Buffer Effectiveness | Nest Final Outcome |
|---|---|---|---|---|---|
| 2774-R1 | HLZ-H2A | Northern Mockingbird | Approved for staking, BMP installation, vegetation clearing, and grading activities (Ground: 100ft) | The buffer was approved for a nest that was slightly dilapidated with one egg. No adults were ever observed attending the nest. | The Avian Specialist reported the nest was abandoned with causes listed as non-project related. No adults were ever observed attending the nest. |
| 2548 | M123-T1 | Red-tailed Hawk | Approved for Splicing Activities (Ground: 0ft Horizontal, 75ft Vertical) | Avian Specialists observed adults incubating the nest during construction activities. No agitated behavior was reported. | One month after construction activities completed an Avian Specialist checked the nest and observed one dead chick. The nest was reported as failed but not project related. |
| 2766 | Menifee Yard | Killdeer | Approved for yard deconstruction activities (Ground: 200ft) | The adult was observed incubating the nest during construction activities. No agitated behavior was observed. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2354 | Series Capacitor | Common Raven | Approved for continued above and below ground construction activities (25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was reported by an Avian Specialist to have successfully fledged. |
| 2539 | Series Capacitor | Cactus Wren | Approved for splicing (Ground: 25ft) and ongoing construction activities at the Series Capacitor (Ground: 170ft) | The Avian Specialists observed the nest during construction activities although no activity had been seen at the nest since the initial observation of nest building. | The nest was reported as inactive by Avian Specialists after several observations of no activity were made after the initial observation of nest building. |
| 2540 | Series Capacitor | Say's Phoebe | Approved for splicing activities (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2796 | Series Capacitor | Say's Phoebe | Approved for continued deliveries and installation of substation equipment (Ground: 25ft) | The Avian Specialists observed the nest during construction activities and no agitated behavior was reported. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2803 | Summit Yard | Verdin | Approved for deconstruction activities (Ground: 30ft) | Avian Specialist observed the chick off of the nest by the time construction began at the site. | The nest was determined by an Avian Specialist to have successfully fledged. |
| 2804 | Summit Yard | Verdin | Approved for deconstruction activities (Ground: 250ft) | Avian Specialists observed one Verdin, a possible fledgling, enter the nest during construction activities. No agitated behavior was observed. | The nest was determined by an Avian Specialist to have successfully fledged. |

## Appendix 14. DPV1 and DPV2 Towers with Nest Deterrent Buoys and Nesting Birds

| Nearest DPV2 Tower | Tower w/Buoy & Nest | FRED Nest ID | Species | Notes |
|---|---|---|---|---|
| 1055 | DPV1 Tower M13-T2 | 2630 | CORA | Common ravens (FRED ID 2630) nested in this tower despite the use of buoys. The nest successfully fledged. |
| 1075 | DPV1 Tower M18-T2 | 2377 | CORA | Common ravens (FRED ID 2377) nested in this tower despite the use of buoys. The nest successfully fledged. |
| 1094 | DPV1 Tower M24-T2 | 2217 | RTHA | Red-tailed hawks (FRED ID 2217) nested in this tower despite the use of buoys. The nest successfully fledged. |
| 1108 | DPV1 Tower M28T2 | 2433 | CORA | Common ravens (FRED ID 2433) nested next to and partially under the buoy. The nest successfully fledged. |
| 1120 | 1120 | 2655-R1 | HOFI | A pair of house finches (FRED ID 2655-R1) started building a nest behind a buoy placed on this tower. No activity beyond nest building was observed. |
| 1121 | M32T2 | 2556 | CORA | Common ravens (FRED ID 2556) nested in an existing nest under a buoy placed in this tower. Two of the chicks were suspected to have been predated. The third is suspected to have fledged. |
| 1131 | M35T1 | 2724 | CORA | Common ravens (FRED ID 2724) nested in an existing nest under a buoy placed in this tower. The nest successfully fledged. |
| 1134 | 1134 | 2555 | CAKI | Cassin's kingbirds (FRED ID 2555) nested under a buoy placed in this tower. The nest successfully fledged. |
| 1137 | M36T4 | 2628 | RTHA | Red-tailed hawks (FRED ID 2628) nested next to a buoy placed in this tower. The nest successfully fledged. |
| 2405 | M184T3 | 2565 | RTHA | A red-tailed hawk pair (FRED ID 2565) managed to wedge inside an existing nest, next to the buoy placed in the tower. The outcome of the nest is unknown, the nest was not checked continuously after construction ceased in the area. |
| 2406 | M184T2 | 2200 | RTHA | A pair of red-tailed hawks (FRED ID 2200) began nesting behavior in an existing nest under a buoy but then moved to the nearby DPV2 tower to nest. |
| 2410 | M183T3 | 2465 | RTHA | This red-tailed hawk nest (FRED ID 2465) had a buoy installed above it ahead of the nesting season. The nest was first noticed to be occupied on 3/25/13 with the buoy in place. The buoy was not removed and the hawk continued to successfully incubate on the nest for at least four weeks. High winds in the area at some point positioned the buoy over the nest in a way that caused the hawk(s) to abandon the nest. |
| 2449 | M171T3 | 2434 | RTHA | A pair of red-tailed hawks nested (FRED ID 2434) under a buoy placed on an existing nest. The pair pushed the buoy aside. The nest successfully fledged. |

## Appendix 15. FAA Filings for the DPV2 Transmission Line Project

| Tower/Span | Height Above Ground Level (AGL) | 7460-1 Requirement | Date Maximum Height Reached | 7460-2 Status | Notes |
|---|---|---|---|---|---|
| **CRS to Devers Segment** | | | | | |
| 2409 | 153 feet AGL | Red Light | 1/30/13 | Filed: 2/1/13 | Verified Operational by EM |
| 2410 | 185 feet AGL | Red Light | 1/28/13 | Filed: 1/30/13 | Verified Operational by EM |
| 2411 | 118 feet AGL | Red Light | 2/1/13 | Filed: 2/4/13 | Verified Operational by EM |
| 2412 | 111 feet AGL | Red Light | 1/16/13 | Filed: 1/24/13 | Verified Operational by EM |
| 2413 | 130 feet AGL | Red Light | 1/28/13 | Filed: 1/30/13 | Verified Operational by EM |
| 2414 | 172 feet AGL | Red Light | 2/2/13 | Filed: 2/4/13 | Verified Operational by EM |
| 2415 | 161 feet AGL | Red Light | 1/21/13 | Filed: 1/24/13 | Verified Operational by EM |
| 2416 | 153 feet AGL | Red Light | 1/24/13 | Filed: 1/25/13 | Verified Operational by EM |
| 2417 | 185 feet AGL | Red Light | 1/25/13 | Filed: 1/28/13 | Verified Operational by EM |
| 2418 | 118 feet AGL | Red Light | 1/26/13 | Filed: 1/28/13 | Verified Operational by EM |
| 2420 | 111 feet AGL | Red Light | 1/30/13 | Filed: 2/1/13 | Verified Operational by EM |
| Span 2221-2222 | 246 feet AGL | Spherical Markers | 3/1/13 | Filed: 3/5/13 | Verified Installed by EM |
| Span 2223-2224 | 229 feet AGL | Spherical Markers | 3/1/13 | Filed: 3/5/13 | Verified Installed by EM |
| Span 2309-2310 | 227 feet AGL | Spherical Markers | 3/29/13 | Filed: 4/1/13 | Verified Installed by EM |
| Span 2310-2312 | 220 feet AGL | Spherical Markers | 3/29/13 | Filed: 4/1/13 | Verified Installed by EM |
| Span 2412-2413 | 327 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2413-2414 | 208 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2415-2416 | 241 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2420-2421 | 235 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2422-2423 | 221 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2423-2424 | 254 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| Span 2424-2425 | 218 feet AGL | Spherical Markers | 2/28/13 | Filed: 3/4/13 | Verified Installed by EM |
| **Devers to Valley Segment** | | | | | |
| 1000X (6894 OE) | 236 feet AGL | Red Light | 1/21/13 | Filed: 1/24/13 | Verified Operational by EM |
| 2000X | 238 feet AGL | Red Light | 1/21/13 | Filed: 1/24/13 | Verified Operational by EM |

## Appendix 15. FAA Filings for the DPV2 Transmission Line Project

| Tower/Span | Height Above Ground Level (AGL) | 7460-1 Requirement | Date Maximum Height Reached | 7460-2 Status | Notes |
|---|---|---|---|---|---|
| 1071 | 167 feet AGL | Red Light | 3/25/13 | Filed: 3/27/13 | Verified Operational by EM |
| 1072 | 125 feet AGL | Red Light | 4/22/13 | Filed: 4/29/13 | Verified Operational by EM |
| 1073 | 116 feet AGL | Red Light | 4/3/13 | Filed: 4/25/13 | Note: Lights installed within 5-day window but filing was delayed until 4/25 as FAA website was down. Verified Operational by EM |
| 1081 | 131 feet AGL | Red Light | 3/14/13 | Filed: 3/18/13 | Verified Operational by EM |
| Span Devers Rack to Tower 1000 (6855 OE) | 269 feet AGL | Spherical Markers | 3/11/13 | Filed: 3/13/13 | Verified Installed by EM |
| Span 1015-1016 (6856 OE) | 270 feet AGL | Spherical Markers | 4/20/13 | Filed: 4/29/13 | Verified Installed by EM |
| Span 1016-1017 (6857 OE) | 238 feet AGL | Spherical Markers | 4/20/13 | Filed: 4/29/13 | Verified Installed by EM |
| Span 1031-1032 (6858 OE) | 290 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1032-1033 (6859 OE) | 208 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1033-1034 (6860 OE) | 250 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1034-1035 (6861 OE) | 278 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1036-1037 (6862 OE) | 224 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1042-1043 (6863 OE) | 320 feet AGL | Spherical Markers | 9/7/13 | Filed: 9/10/13 | Verified Installed by EM |
| Span 1043-1044 (6864 OE) | 219 feet AGL | Spherical Markers | 9/11/13 | Filed: 9/12/13 | Verified Installed by EM |
| Span 1050-1051 (6865 OE) | 281 feet AGL | Spherical Markers | 9/11/13 | Filed: 9/12/13 | Verified Installed by EM |
| Span 1065-1066 (6866 OE) | 256 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1066-1067 (6867 OE) | 208 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1067-1068 (6868 OE) | 201 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1069-1070 (6869 OE) | 302 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1070-1071 (6870 OE) | 261 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1071-1072 (6871 OE) | 213 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1073-1074 (6872 OE) | 230 feet AGL | Spherical Markers | 6/13/13 | Filed: 6/24/13 | Verified Installed by EM |
| Span 1080-1081 (6873 OE) | 212 feet AGL | Spherical Markers | 6/22/13 | Filed: 6/25/13 | Verified Installed by EM |
| Span 1090-1091 (6874 OE) | 205 feet AGL | Spherical Markers | 6/28/13 | Filed: 7/2/13 | Verified Installed by EM |

## Appendix 15. FAA Filings for the DPV2 Transmission Line Project

| Tower/Span | Height Above Ground Level (AGL) | 7460-1 Requirement | Date Maximum Height Reached | 7460-2 Status | Notes |
|---|---|---|---|---|---|
| Span 1092-1093 (6875 OE) | 235 feet AGL | Spherical Markers | 6/28/13 | Filed: 7/2/13 | Verified Installed by EM |
| Span 1093-1094 (6876 OE) | 239 feet AGL | Spherical Markers | 6/28/13 | Filed: 7/2/13 | Verified Installed by EM |
| Span 1097-1098 (6877 OE) | 205 feet AGL | Spherical Markers | 7/10/13 | Filed: 7/15/13 | Verified Installed by EM |
| Span 1102-1103 (6878 OE) | 328 feet AGL | Spherical Markers | 7/10/13 | Filed: 7/15/13 | Verified Installed by EM |
| Span 1103-1104 (6879 OE) | 320 feet AGL | Spherical Markers | 7/10/13 | Filed: 7/15/13 | Verified Installed by EM |
| Span 1105-1106 (6880 OE) | 201 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/29/13 | Verified Installed by EM |
| Span 1106-1107 (6881 OE) | 324 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1107-1108 (6882 OE) | 345 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1108-1109 (6883 OE) | 289 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1109-1110 (6884 OE) | 264 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1111-1112 (6885 OE) | 262 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1113-1114 (6886 OE) | 212 feet AGL | Spherical Markers | 7/16/13 | Filed: 7/19/13 | Verified Installed by EM |
| Span 1122-123 (6887 OE) | 374 feet AGL | Spherical Markers | 7/30/13 | Filed: 8/5/13 | Verified Installed by EM |
| Span 1127-1128 (6888 OE) | 249 feet AGL | Spherical Markers | 7/30/13 | Filed: 8/5/13 | Verified Installed by EM |
| Span 1130-1131 (6889 OE) | 220 feet AGL | Spherical Markers | 7/30/13 | Filed: 8/5/13 | Verified Installed by EM |
| Span 1137-1138 (6890 OE) | 204 feet AGL | Spherical Markers | 7/30/13 | Filed: 8/5/13 | Verified Installed by EM |
| Span 1143-1144 (6891 OE) | 204 feet AGL | Spherical Markers | 8/6/13 | Filed: 8/7/13 | Verified Installed by EM |
| Span 1144-1145 (6892 OE) | 209 feet AGL | Spherical Markers | 8/6/13 | Filed: 8/9/13 | Verified Installed by EM |
| Span 1145-1146 (6893 OE) | 201 feet AGL | Spherical Markers | 8/6/13 | Filed: 8/9/13 | Verified Installed by EM |

## Appendix 16. TEWS Requests for the 500 kV Transmission Line

| TEWS Request | Date Requested | Date Approved | Description |
|---|---|---|---|
| #1 | 7/20/2011 | 7/27/2011 | Use of offsite hydrant and installation of water tank at location adjacent to Blythe Construction Yard |
| #2 | 7/28/2011 | 8/4/2011 | Use of offsite hydrant, located along the frontage of the Menifee Construction Yard, and a flexible hose to supply water to a 4,000 gallon water truck. |
| #3 | 8/16/2011 | 8/16/2011 | Revised use of offsite hydrant, located along the frontage of the Menifee Construction Yard, approximately 200 yards north of previously approved location. |
| — | 9/6/2011 | Retracted | Revised use of offsite hydrant, including installation of above ground pipeline and water towers. |
| #4 | 9/29/2011 | 9/29/2011 | Use of parking areas along primary access road within 400-ft total distance exclusionary fencing locations with exception of sites within the Coachella Valley Preserve. |
| #5 | 7/13/2012 | 7/17/2012 | Request to use two existing access roads near Tower 1118 and 1119. |
| #6 | 7/31/2012 | 8/3/2012 | Request to use an existing access road to Tower 1122 |
| #7 | 8/1/2012 | 8/3/2012 | Request to use an existing access road to H9 |
| #8 | 11/7/2012 | 11/8/2012 | Request to use an existing access road near Tower 1141. |
| #9 | 3/27/2013 | 3/28/2013 | Request to use a turnout off Highway 79. |
| #10 | 3/29/2013 | 3/29/2013 | Request to use an existing road near Tower 1099. |
| #11 | 5/17/2013 | 5/20/2013 | Request to use an existing road between Towers 1057 and 1058. |
| #12 | 5/22/2013 | 5/24/2013 | Request to use an area off the northbound side of Highway 79 as a turnout. |
| #13 | 5/23/2013 | 5/24/2013 | Request to use an existing southbound turnout off Highway 79. |
| #14 | 5/29/2013 | 5/29/2013 | Request to extend Wire Site 28 near Tower 1075. |
| #15 | 5/29/2013 | 5/29/2013 | Request to use an existing access road to stage sleeving equipment to conduct sleeving operations. |
| #16 | 6/10/2013 | 6/11/2013 | Request to use an existing access road to conduct sleeving operations between Towers 1110 and 1111. |
| #17 | 6/10/2013 | 6/11/2013 | Request to use an existing road to access Guard Structure 58 near Tower 1088. |
| #18 | 6/19/2013 | 6/19/2013 | Request to extend guard structure 96 near Tower 1152. |
| #19 | 6/19/2013 | Retracted | Request to extend pull site 51 near Valley Substation. Requested area is located adjacent to a Jurisdictional drainage; therefore this request cannot be processed as a TEWS, but rather a variance. |
| #19 Revised | 6/21/2013 | 6/21/2013 | A revised request to extend the pull site and to exclude the area near the drainage. |
| #20 | 6/24/2013 | 6/25/2013 | Request to extend Guard Structure 62A near Tower 1090. |
| #21 | 6/26/2013 | Retracted | Request to use a disturbed area near Guard Structure 60 near Tower 1089. This site was used prior to the request and SCE determined after using the site, it was no longer needed. |
| #22 | 6/27/2013 | 6/27/2013 | Request to conduct splicing operations on an existing road by Tower 1097. |
| #23 | 7/1/2013 | 7/2/2013 | Request to extend Guard Structure 94 near Tower 1152. |
| #24 | 7/3/2013 | 7/9/2013 | Request to use a disturbed road near Tower 1129 to conduct sleeving operations for wire stringing. |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1152 | Vegetation clearing only | General | Grassland | 1/14/2014 | Hydroseed | Soil | High-level site restoration | All annuals and non-native grasses | |
| 1148 | Vegetation clearing and light grading | Visual | Grassland | 1/14/2014 | Hydroseed | Soil | High-level site restoration | All annuals and non-native grasses | |
| 1147 | Vegetation clearing and light grading | Visual | Chaparral | 1/14/2014 | Broadcast | Soil | N/A | Unable to access | |
| Access road to DV-GS87A | Vegetation clearing and light grading | General | RSS | 1/15/2014 | Broadcast | Soil | N/A | Couldn't access, a fence was erected I couldn't get through | |
| DV-GS87A | Vegetation clearing and light grading | General | RSS | 1/15/2014 | Broadcast | Soil | N/A | Couldn't access, a fence was erected I couldn't get through | |
| 1145 | Heavily graded | Visual | RSS | 1/15/2014 | Hydroseed | Soil | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1144 | Heavily graded | General | RSS | 1/15/2014 | Hydroseed | Jute | Moderate to low level restoration | Regrowth mostly annuals |  |
| DV Pull Site No. 46A | Vegetation clearing and light grading | PSE | RSS | 1/15/2014 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1143 | Heavily graded | General | RSS | 1/15/2014 | Hydroseed | Jute/soil | Low-level site restoration | All annuals and non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1142 | Heavily graded | General | Chaparral | 12/21/2013 | Hydroseed | Jute | Low-level site restoration | All annuals and non-native grasses |  |
| 1141 | Heavily graded | General | Chaparral | 12/21/2013 | Hydroseed | Jute | Low-level site restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1140 | Heavily graded | General | Chaparral | 12/21/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1139 | Heavily graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| Access road to DV Splice Site No. 17A | Moderately graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| DV Splice Site No. 17A | Moderately graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1138 | Heavily graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | Low-level site restoration | All annuals and non-native grasses | |
| 1137 | Heavily graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | N/A | Unable to access | |
| 1136 | Heavily graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | N/A | Unable to access | |
| 1135 | Heavily graded | General | Chaparral | 12/22/2013 | Hydroseed | Jute | N/A | Unable to access | |
| DV-GS81B | Vegetation clearing and light grading | PSE | RSS | 1/17/2014 | Hydroseed | Soil | Low-level site restoration | All annuals and non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1133 | Heavily graded | Visual | RSS | 1/17/2014 | Hydroseed | Jute/soil | Low-level site restoration | All annuals and non-native grasses |  |
| 1131 | Heavily graded | Visual | RSS | 1/16/2014 | Hydroseed | Soil | Moderate to low level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1130 | Heavily graded | PSE | RSS | 1/16/2014 | Hydroseed | Soil | Moderate to low level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1129 | Heavily graded | General | RSS | 1/16/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1128 | Heavily graded | General | Chaparral | 12/23/2013 | Hydroseed | Jute/soil | N/A | Inaccessible, people using area for shooting, did not approach | |
| 1127 | Heavily graded | General | Chaparral | 12/23/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1126 | Heavily graded | General | Chaparral | 12/23/2013 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1125 | Heavily graded | General | Chaparral | 12/23/2013 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1124 | Heavily graded | PSE | RSS | 1/16/2014 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1123 | Heavily graded | PSE | RSS | 1/16/2014 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| DV-GS71 | Vegetation clearing only | PSE | RSS | 1/21/2014 | Hydroseed | Soil | Moderate to low level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1114 | Heavily graded | SWPPP | RSS | 1/21/2014 | Hydroseed | Jute/soil | Moderate to low level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1113 | Helicopter construction; hand clearing and boulder removal | PSE | RSS | 1/21/2014 | Hydroseed | Jute | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1112 | Helicopter construction; hand clearing and boulder removal | PSE | RSS | 1/21/2014 | Hydroseed | Jute | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |
| 1111 | Heavily graded | General | RSS | 1/22/2014 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| SPLICE SITE 1110 | Vegetation clearing only | General | Chaparral | 12/26/2013 | Hydroseed | Jute/soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| IMPLOSIVE SPLICE SITE NO 12 | Vegetation clearing only | General | Chaparral | 12/26/2014 | Hydroseed | Jute/soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1110 | Heavily graded | SWPPP | Chaparral | 12/26/2013 | Hydroseed | Jute/soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1109 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 12/27/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1108 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 12/26/2013 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1107 | Helicopter construction; hand clearing and boulder removal | SWPPP | RSS | | Hydroseed | Jute | N/A | No seeding conducted, only jute netting installed | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1106 | Heavily graded | SWPPP | RSS | 1/22/2014 | Hydroseed | Jute | Low-level site restoration | All annuals and non-native grasses |  |
| 1105 | Heavily graded | SWPPP | RSS | 1/22/2014 | Hydroseed | Jute | Low-level site restoration | All annuals and non-native grasses | |
| DV Pull Site No. 39 | Heavily graded | SWPPP | RSS | 1/23/2014 | Hydroseed | Jute | Low-level site restoration | All annuals and non-native grasses | |
| 1104 | Heavily graded | SWPPP | Chaparral | 12/26/2013 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1103 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 12/27/2013 | Hydroseed | Jute | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1102 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 12/27/2013 | Hydroseed | Jute | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1101 | Heavily graded | General | Chaparral | 12/28/2013 | Hydroseed | Jute/soil | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| WIRE SITE NO 36 | Heavily graded | SWPPP | Chaparral | 12/28/2013 | Hydroseed | Jute | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |
| 1100 | Heavily graded | SWPPP | Chaparral | 12/30/2013 | Hydroseed | Soil | Low-level site restoration | All annuals and non-native grasses | |
| 1099 | Heavily graded | SWPPP | Chaparral | 12/28/2013 | Hydroseed | Jute/soil | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |
| 1098 | Heavily graded | SWPPP | Chaparral | 12/28/2013 | Hydroseed | Jute/soil | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |
| 1097 | Heavily graded | SWPPP | Chaparral | 12/30/2013 | Hydroseed | Jute | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |
| 1096 | Heavily graded | SWPPP | Chaparral | 12/30/2013 | Hydroseed | Jute | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |
| 1095 | Heavily graded | SWPPP | Chaparral | 1/2/2014 | Hydroseed | Jute/soil | Low-level site restoration | All annuals and non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| IMPLOSIVE SPLICE SITE NO 10 | Vegetation clearing and light grading | General | Chaparral | 1/2/2014 | Hydroseed | Soil | High-level site restoration | Filled in, matching surrounding non-native grasses vegetation, unable to discern boundaries of the site. | |
| DV-FO-30 | Vegetation clearing and light grading | General | Chaparral | 1/2/2014 | Hydroseed | Soil | Moderate to low level restoration | All annuals and non-native grasses | |
| 1094 | Heavily graded | General | Chaparral | 1/2/2014 | Hydroseed | Soil | Low-level site restoration | Site ripped up by OHV usage; all annuals and non-native grasses | |
| DV-GS64 | Vegetation clearing only | General | Chaparral | 1/2/2014 | Hydroseed | Soil | Low-level site restoration | All annuals and non-native grasses | |
| 1093 | Heavily graded | SWPPP | Chaparral | 1/2/2014 | Hydroseed | Jute | Low-level site restoration | Annuals and non-native grasses on slopes, very little growth on flat areas | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1092 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 1/2/2014 | Hydroseed | Soil | High-level site restoration | Site is a mixture of non-native grasses and chaparral growing back |  |
| 1091 | Heavily graded | SWPPP | Chaparral | 1/2/2014 | Hydroseed | Jute | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1090 | Heavily graded | Visual | Grassland | 1/13/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| DV-GS60 | Vegetation clearing only | General | Grassland | 1/13/2014 | Broadcast | Soil | Moderate-level restoration | All annuals and non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1089 | Vegetation clearing and light grading | Visual | Grassland | 1/13/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1088 | Vegetation clearing and light grading | Visual | Grassland | 1/13/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| DV-GS58 | Vegetation clearing only | General | Grassland | 1/10/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1087 | Vegetation clearing and light grading | Visual | Grassland | 1/13/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1086 | Vegetation clearing and light grading | Visual | Chaparral | 1/3/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1085 | Vegetation clearing and light grading | Visual | Grassland | 1/10/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| DV PULL SITE NO 32 | Vegetation clearing and light grading | General | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| ACCESS ROAD TO DV PULL SITE NO 32 | Vegetation clearing and light grading | General | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1084 | Vegetation clearing and light grading | General | RSS | 1/23/2014 | Hydroseed | Soil | N/A | Unable to access | |
| DV-GS54 expansion | Vegetation clearing and light grading | General | RSS | 1/23/2014 | Hydroseed | Soil | N/A | Unable to access | |
| GS54 | Vegetation clearing only | General | RSS | 1/23/2014 | Hydroseed | Soil | N/A | Unable to access | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| DV PULL SITE NO 33 | Vegetation clearing and light grading | General | RSS | 1/23/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1083 | Vegetation clearing and light grading | Visual | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate to high level restoration | All annuals and non-native grasses | |
| 1082 | Heavily graded | Visual | Chaparral | 1/3/2014 | Hydroseed | Soil | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| DV-GS52 | Vegetation and light grading | General | Chaparral | 1/6/2014 | Hydroseed | Soil | Moderate-level restoration | Mostly annuals and non-native grasses, some perennials growing | |
| 1081 | Heavily graded | SWPPP | Chaparral | 1/6/2014 | Hydroseed | Jute | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1080 | Heavily graded | SWPPP | Chaparral | 1/6/2014 | Hydroseed | Jute | N/A | Unable to access | |
| DV SPLICE SITE NO 7 | Heavily graded | General | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1079 | Heavily graded | General | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| DV-GS48A | Vegetation clearing only | General | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1078 | Vegetation clearing and light grading | Visual | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1077 | Vegetation clearing and light grading | Visual | Grassland | 1/9/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1075 | Heavily graded | SWPPP | Chaparral | 1/6/2014 | Hydroseed | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| DV PULL SITE NO 29 | Heavily graded | General | Chaparral | 1/13/2014 | Broadcast | Soil | Low-level site restoration | Very little growth occurring, mostly non-native grasses | |
| 1074 | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 1/6/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1073 | Vegetation clearing and light grading | SWPPP | Chaparral | 1/7/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1072 | Helicopter construction; hand clearing and boulder removal | SWPPP | RSS | 1/24/2014 | Broadcast | Soil | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |
| DV PULL SITE NO 26 | Vegetation clearing only | General | RSS | 1/24/2014 | Hydroseed | Soil | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |
| 1071 | Heavily graded | SWPPP | RSS | 1/24/2014 | Broadcast | Soil | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |
| DV PULL SITE NO 27 | Vegetation clearing only | General | Chaparral | 1/7/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1070 | Helicopter construction; hand clearing and boulder removal | SWPPP | RSS | 1/24/2014 | Hydroseed | Soil | High-level site restoration | RSS growing back well, almost matching surrounding vegetation | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1069 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 1/7/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1068 | Helicopter construction; hand clearing and boulder removal | SWPPP | Chaparral | 1/7/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1067 | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 1/7/2014 | Hydroseed | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| 1066 | Vegetation clearing and light grading | General | Chaparral | 1/7/2014 | Broadcast | Soil | High-level site restoration | Chaparral growing back well, almost matching surrounding vegetation | |
| H7-DV | Vegetation clearing and light grading | SWPPP | Grassland | 1/8/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1065 | Vegetation clearing and light grading | General | Grassland | 1/8/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1062/R2 | Vegetation clearing and light grading | General | Grassland | 1/8/2014 | Hydroseed | Soil | Moderate-level restoration | All annuals and non-native grasses | |
| 1050 | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 2/4/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |

## Appendix 17. DPV2 Transmission Line Project Restoration Effort

| Engineering Feature Name | Type of Initial Disturbance | Restoration Requirement | Seed Type Mix | Seeding Completed | Seeding Method | Seed Placement | Restoration Progress as of 04/10/14 | CPUC EM Comments | Representative Photos |
|---|---|---|---|---|---|---|---|---|---|
| 1050 Helicopter pad | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 2/4/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1049 | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 2/5/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1049 Helicopter pad | Helicopter construction; hand clearing and boulder removal | General | Chaparral | 2/5/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1035 | Helicopter construction; hand clearing and boulder removal | Visual | Chaparral | 2/11/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1034 | Helicopter construction; hand clearing and boulder removal | Visual | Chaparral | 2/11/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1033 | Helicopter construction; hand clearing and boulder removal | Visual | Chaparral | 2/11/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |
| 1032 | Helicopter construction; hand clearing and boulder removal | Visual | Chaparral | 2/5/2014 | Broadcast | Soil | N/A | Unable to access, helicopter only | |