Devers-Palo Verde No. 2 Transmission Line Project



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# 81 Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
APE	Area of Potential Effect
APM	Applicant Proposed Measure
BLM	U.S. Bureau of Land Management
CAISO	California Independent System Operators
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
CRS	Colorado River Switchyard
CR-D	Colorado River Switchyard to Devers Substation line
DPV1	Devers-Palo Verde No. 1 Transmission Line
DPV2	Devers-Palo Verde No. 2 Transmission Line
DSW	Desert Southwest Transmission Line Alternative
DV1	Devers to Valley No. 1 Transmission Line
DV2	Devers to Valley No. 2 Transmission Line
EIR/EIS	Environmental Impact Report/Environmental Impact Statement
EMF	Electric & Magnetic Fields
FAA	Federal Aviation Administration
kV	kilovolt
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OPGW	Optical Ground Wire
Project	Devers-Palo Verde No. 2 Transmission Line Project
SCE	Southern California Edison

SPS	Special Protection System
SVC	Static VAR (Volt-Ampere Reactive) Compensator
ТСР	Traditional Cultural Property
VRM	Visual Resource Management

82

# 83 1.0 Introduction

The purpose of this document is to describe refinements that have occurred to the
Devers-Palo Verde No. 2 Transmission Line Project (DPV2 or Project) since the Final

86 Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the

Project was certified by the California Public Utilities Commission (CPUC) in 2007 and

subsequently modified as a California-only project by the CPUC (contingent upon CAISO)

89 approval) in 2009.

## 90 1.1 EIR/EIS Background

91 The DPV2 project originally proposed and described in the EIR/EIS was a 230-mile, 500

92 kilovolt (kV) electric transmission line between SCE's existing Devers Substation in

93 California and Harquahala Generating Substation in Arizona (referred to as "Devers-

94 Harquahala" or D-H) and included the replacement of an approximately 48-mile 230 kV

95 transmission line in California (referred to as "West of Devers" upgrades). The DPV2 project

96 included the two transmission line elements, a new Midpoint Substation, several substation

97 upgrades, other ancillary facilities, and a telecommunications system. The Final EIR/EIS

98 was completed in October 2006.

99 The California alternatives in the DPV2 Final EIR/EIS included the Desert Southwest
100 Transmission Project Alternative and the Devers-Valley No. 2 Alternative (DV2).

101 The Desert Southwest Transmission Line Project Alternative (DSW) would have replaced an

102 approximately 118-mile-long segment of the DPV2 in a parallel right-of-way. The Desert

103 Southwest Transmission Line Alternative included a new substation in the Blythe area that

104 is also called the Midpoint Substation; however, the actual location of this DSW Midpoint

105 Substation differs from the DPV2 Midpoint Substation. The DSW Midpoint Substation

- 106 location was approximately five miles northwest of Southern California Edison's (SCE's)
- 107 originally proposed Midpoint Substation location for DPV2. Greater details for the DSW
- 108 Midpoint Substation site are provided in the 2005 Final EIS/EIR for the Desert Southwest
- 109 Transmission Line Project (Imperial Irrigation District, 2005). The DPV2 Final EIR/EIS
- 110 identified the two Midpoint Substation as environmentally equivalent and stated that either
- 111 Midpoint Substation location is environmentally superior/preferable.
- 112 DV2 would create a second 500 kV transmission line from the Devers Substation to the

113 existing Valley Substation, and was identified as an alternative to the West of Devers

transmission line upgrades. This alternative would traverse a small portion of the San

- 115 Bernardino National Forest.
- 116 The DPV2 Final EIR/EIS was certified by the CPUC on January 25, 2007, and as part of its
- 117 granting of the Certificate of Public Convenience and Necessity via D.07-01-040, the CPUC
- 118 approved the use of the DV2 alternative rather than the West of Devers upgrades. Following
- the CPUC's approval of DPV2 on June 6, 2007, the Arizona Corporation Commission denied
- 120 SCE approval to construct the Arizona portion of the Project via D.69638. Subsequently, on

- 121 November 20, 2009, via D.09-11-007, the CPUC granted modification of D.07-01-040 and
- 122 authorized construction of the California (only) portion of the Project (including either the
- 123 DPV2 or the DSW Midpoint Substation location), conditioned on subsequent approval from
- 124 the California Independent System Operator.

# 125 1.2 Need for Refinements and Current DPV2 Project

126 Following the approval of the California-only portion of the DPV2 project, more detailed

127 engineering has occurred, and continues to occur, on various elements of the project. The

128 overall DPV2 project is essentially the same as what was approved by the CPUC, with 129 additional refinements to several project elements, specifically:

- 130 1) Construction yards.
- Yards that differ in size and location are needed to accommodate construction of DPV2.
- 133 2) Colorado River Switchyard (CRS, formerly referred to as the Midpoint Substation)134 refinements and related activities.
- 135 Footprint location adjustments will occur for engineering purposes.
- 136 Related activities are clarified.
- 137 3) Telecommunication system details.
- A telecommunications link between the CRS and the existing Blythe Service Center
   is needed because only the California portion of the Project was approved.
- 140 4) Tower heights.
- Tower height adjustments are needed to accommodate terrain and meet current conductor clearance requirements.
- 143 5) Minor DV1 relocation in the Cabazon area.
- Minor DV1 relocation is needed to route DV1 through land owned by SCE.
- 145 6) Clarification of improvements to the Valley Substation.
- Clarification is needed to update the Final EIR/EIS with language in the Draft
   EIR/EIS (information regarding the Valley Substation upgrades was not included in
   the Final EIR/EIS).
- 149
- 150 Figure 1: Project Overview Map shows the current project and locations of the various
- 151 project elements.

# 152 2.0 DPV2 Refinements and Comparison

153 This section describes the project elements that were approved by the CPUC in 2009,

- refinements that have been made to the DPV2 project since the approval, and provides a
- 155 comparison of the information in the Final EIR/EIS and the anticipated effects of the
- 156 refinements.

## 157 2.1 Construction Yards

#### 158 2.1.1 Approved Project Elements – Construction Yards

The DPV2 Final EIR/EIS described the establishment of approximately seven temporary construction yards located at strategic points along the route within both Arizona (three yards) and California (four yards) for the Devers-Harquahala 500 kV transmission line ending at Devers Substation. Each yard would be three to 10 acres in size, depending on land availability and intended use.

- 164 The following temporary construction yard locations for the Devers-Harquahala 500 kV165 Segment were described in the Final EIR/EIS:
- Palm Springs (Devers) Yard. West side of Diablo Road at Devers Substation, California.
   5.9 acres (270 by 935 feet). Area consists of two fenced areas and one unfenced area.
- Indio Yard. East side of Dillon Road, 300 feet north of Fargo Canyon Road, 1,500 feet
   north of the existing Devers-Palo Verde No. 1 (DPV1) 500 kV line, California. 3.2 acres
   (250 by 550 feet). Area is fenced and lighted.
- Desert Center Yard. 1,000 feet northwest of the intersection of Rice Road and Ragsdale
   Road, California. 3.2 acres (250 by 550 feet). Area is fenced and being used by current
   owner for miscellaneous storage.
- Blythe Yard. North side of Hobson Way, one mile west of Neighbors Boulevard, on the
   west side of Blythe Substation, California. 3.2 acres (250 by 550 feet). Area is fenced and
   currently contains miscellaneous pipe and steel.
- 177 The Final EIR/EIS also included three construction yards in Arizona, as follows:
- Quartzsite Yard. 1,000 feet north of the intersection of Quartzsite Road and Main Street,
   Arizona. Five acres estimated. Area is being used for overflow recreational vehicle
   parking.
- Vicksburg Yard. South of a fuel station on the south side of Interstate 10, Arizona.
   Five acres estimated. Original fencing has been removed and property is abandoned.
- **183 Tonopah Yard**. Northwest of the intersection of West Indian School Road and North
- 184 411th Avenue, Arizona. Some development has occurred on the original property used185 for Devers–Palo Verde 1 Project.

186 The Final EIR/EIS described the construction yards as follows:

187 Each yard would be used as a reporting location for workers, and for vehicle and
188 equipment parking and material storage. The yards would have offices for
189 supervisory and clerical personnel. Normal maintenance of construction equipment
190 would be conducted at these yards. The maximum number of workers reporting to
191 any one yard is not expected to exceed 144 at any one time. Each yard would be
192 three to 10 acres in extent, depending on land availability and intended use.

193 During construction, existing concrete supply facilities would be used where 194 feasible. If no concrete supply facilities exist in certain areas, a temporary concrete 195 batch plant would be set up. If necessary, approximately two acres of property 196 would be sub-partitioned from the marshalling area of the Desert Center yard for a temporary concrete batch plant. Equipment would include a central mixer unit 197 198 (drum type); three silos for injecting concrete additives, fly ash, and cement; a water 199 tank; portable pumps; a pneumatic injector; and a loader for handling concrete 200 additives not in the silos. Dust emissions would be controlled by watering the area 201 and by sealing the silos and transferring the fine particulates pneumatically between the silos and the mixers. 202

203 As described in the Final EIR/EIS, for construction of the 230 kV West of Devers upgrades, 204 additional construction yards were expected at existing facilities such as Devers, Mira Loma, 205 Vista, and San Bernardino Substations, as well as Etiwanda Generating Station. If it were 206 determined that the land available at these SCE-owned properties was either unavailable 207 because of competing projects or was insufficient, up to two additional yards might be 208 required, each with approximately three to 10 acres. This information is also presumed to 209 apply to the Devers-Valley No. 2 Alternative in the Final EIR/EIS, which was approved and 210 selected in lieu of the West of Devers upgrades.

#### 211 2.1.2 Construction Yard Refinements

As a result of the project changes (selection of the DV2 Alternative as well as inadequate

sizing and/or unavailability of the previously planned construction yard locations), seven

214 new construction yards are now planned. The new yards are as follows (Figure 2:

- 215 Construction Yard Overview Map shows the locations of the new yards and the previously216 approved yards in California):
- Palm Springs (Devers) Yard. An approximately 11.5 acre area on the east side of Devers
   Substation on existing SCE property (see Figure 3a). The site is currently undeveloped.
- Desert Center Yard 1. An approximately 5.5-acre site located northwest of the
   intersection of Rice Road and Ragsdale Road (see Figure 3b). This site is currently
   vacant, fenced and has been previously covered with gravel and used for storage.

 Desert Center Yard 2. An approximately 11.5 acre site located east of the intersection of Rice Road and Ragsdale Road (between Ragsdale Road and the I-10 freeway, see Figure 3b), which could be used for material storage and to accommodate a batch plant, as discussed in the Final EIR/EIS. The site is currently undeveloped.

- **Chiriaco Summit Yard.** An approximately 11.4-acre yard located on the south side of the Chiriaco Summit Airport (see Figure 3c). The site is currently undeveloped.
- Blythe Yard. An approximately 10-acre yard located north of Hobson Way and south of Blythe Airport (see Figure 3d). The site is vacant and has been previously disturbed/graveled.
- Highland Springs Yard. An approximately 6-acre yard located along Highland Springs
   Avenue (see Figure 3e). The site is currently used for cattle grazing. Roadbase would be
   applied to the existing access road, which is outside of the yard.
- Valley Yard. An approximately 10-acre yard located adjacent to and south of SCE's
   Valley Substation along the north side of Matthews Road (see Figure 3f). The site is
   currently vacant and undeveloped. The location of this yard will change due to a recent
   discovery of Stephen's kangaroo rat at the site.

#### 238 **Overflow Yard at the Devers Substation**

- Additional storage of tower steel will be needed as overflow storage for the Devers Yard
- discussed above. For the overflow yard, an approximately 5-acre area of the existing Devers
- Substation would be used for temporary storage of steel. The area is currently covered by
- station specification quality rock within the existing fenced footprint of the Station. Access
- to the overflow yard would be provided through the Devers Substation via an existing gate
- from Diablo Road. This overflow yard would not result in soil or ground disturbances.

#### 246 Helicopter Assembly Yards

- Approximately seven yards are currently planned to support helicopter assembly of towers where tower sites have no road access and are restricted by terrain. The specific locations of these yards are preliminary, are still currently under review, and could be subject to further refinement and subsequent CPUC coordination. However, the preliminary helicopter yard locations are shown in Figure 4.
- 252 2.1.3 Environmental Effects
- 253 Final EIR/EIS Discussion
- 254 The Final EIR/EIS evaluated potential impacts from the development and use of the
- construction yards. The resource areas potentially affected by the construction yards are asfollows:
- Air Quality. Construction activity, including construction yard activity, would generate
   dust and exhaust emissions.
- 259 **Biological.** Ground-disturbing activity, including grading of new access roads,
- transportation, maintenance of construction equipment and supplies, staging area and
- 261 material yard preparation and use, and use or improvement of existing access roads have
- the potential to disturb the vegetation communities.
- 263 Cultural and Paleontological Resources. Construction and use of the yards could cause an
   264 adverse change to known historic properties. Construction and use of the yards could cause

- an adverse change to unknown significant buried prehistoric and historical archaeologicalsites or buried Native American human remains.
- 267 Visual Resources. Construction and use of the yards could cause adverse effects to visual
- resources resulting from short-term visibility of construction activities, equipment, andnight lighting.
- Noise. Noise from the construction and use of the yards could disturb sensitive receptors or
   violate local rules, standards, and/or ordinances.
- Safety. Construction and use of the yards could cause soil contamination as a result of
   improper handling and/or storage of hazardous materials.
- 274 Comparison of Potential Construction Yard Refinement Effects
- 275 Effects from the proposed construction yard activities are anticipated to be consistent with
- the Final EIR/EIS construction yard effects discussion.
- 277 The locations currently proposed for the construction yards are similar to those previously
- 278 proposed in California relative to surrounding conditions, neighboring land uses, locations,
- and operations. Most of the proposed locations have been previously disturbed and are not
- 280 located close to sensitive receptors or other visual sensitivities. Where vacant land is
- contemplated, biological and archaeological surveys have been conducted to ensure that
- 282 potential impacts beyond those already contemplated for the project do not occur. Because
- 283 potential impacts of the current construction yard locations would be similar to those
- associated with the previously approved locations, they would be similarly mitigated by
- applicant proposed measures (APMs) and/or mitigation measures already applied to the
- 286 project through the Final EIR/EIS. The temporary nature of the construction yards further
- 287 minimizes the potential for impacts associated with this component of the project. A
- 288 detailed comparison for each yard is provided in the following text.
- **Palm Springs (Devers) Yard.** The proposed Devers yard is approximately 11.5 acres
- adjacent to the east side of the Devers Substation, north of Powerline Road. This yard would
- replace the approved Palm Springs Yard, which was described as two fenced areas and one
- unfenced area west of Diablo Road at Devers Substation. Both the approved and proposed
- 293 yard locations are in close proximity to Devers Substation, and potential impacts and
- 294 mitigation would be almost identical. No new significant or more severe impacts than
- 295 discussed in the Final EIR/EIS are anticipated.
- **Desert Center Yards**. Two yards (DC-1 and DC-2) with a combined total of approximately
- 29716 acres would be located in Desert Center. DC-1, located northwest of the intersection of
- 298 Rice Road and Ragsdale Road, is fenced and has recently been used/disturbed for a similar
- 299 purpose as is proposed here. DC-2 is located between Ragsdale Road and the I-10 freeway,
- 300 east of Rice Road. DC-2 may include a concrete batch plant. The proposed Desert Center
- 301 Yards would replace the approved Desert Center Yard, which was to be located 1,000 feet
- 302 northwest of the intersection of Rice Road and Ragsdale Road. The approved yard and
- 303 proposed DC-1 yard would be nearly identical in location. The DC-2 yard is adjacent to the
- I-10 freeway. The approved and proposed yard areas are in close proximity to each other.
- As noted previously, a batch plant was already contemplated at the approved Desert Center
   Yard. Therefore, potential impacts and mitigation for those impacts would be similar for the

approved and proposed yards. No new significant or more severe impacts than discussed inthe Final EIR/EIS are anticipated.

309 Chiriaco Summit Yard. The proposed Chiriaco Summit Yard consists of approximately 11.4 310 acres located directly southeast of Chiriaco Summit Airport and adjacent to an existing 311 substation. This area is vacant and currently fenced. The proposed Chiriaco Summit Yard 312 would replace the approved Indio Yard, which consisted of 3.2 acres on the east side of Dillon Road north of Fargo Canyon Road. The Indio Yard was considered too small for the 313 314 current project needs. Although in slightly different geographic areas, both the approved 315 and proposed locations are removed from sensitive receptors. Potential impacts and 316 mitigation would be similar and no new significant or more severe impacts than discussed in the Final EIR/EIS are anticipated. 317

318 **Blythe Yard**. The proposed Blythe Yard consists of approximately 10 acres located north of 319 Hobson Way, west of Neighbors Boulevard and south of the Blythe Airport. The proposed 320 location is fenced with temporary power available and has been previously used/disturbed 321 for a similar purpose as is proposed here. The approved Blythe Yard, comprising 3.2 acres 322 located on the west side of Blythe Substation, is currently being used by the owner and is 323 therefore unavailable. Potential impacts presented by the approved and proposed locations 324 would be similar. No new significant or more severe impacts than discussed in the Final 325 EIR/EIS are anticipated.

326 Highland Springs Yard. This yard would be approximately 6 acres located on the east side 327 of Highland Springs Avenue, just over one mile north of the I-10, within an existing SCE 328 right-of-way. Potential impacts would be similar to those presented by approved project 329 yards and would be adequately addressed via implementation of existing mitigation measures. As with the Valley Yard, the Final EIR/EIS discussed that additional yards west 330 331 of Devers Substation might be needed. To ensure that no new significant impacts would 332 result from this location, the yard has been located a minimum of 500 feet east of Highland 333 Springs Avenue to provide added noise and visual separation between this yard and 334 residences on the west side of Highland Springs Avenue. Other potential impacts associated 335 with a new yard in this area are similar to those anticipated in conjunction with approved 336 yards, and would be addressed by existing mitigation and APMs. No new significant or 337 more severe impacts than discussed in the Final EIR/EIS are anticipated.

338 Valley Yard. The proposed Valley Yard is approximately 10 acres of vacant land located 339 between the existing Valley Substation and Matthews Road in the City of Menifee. With the 340 selection of the DV2 Alternative instead of the West of Devers segment of the project, a 341 construction yard near the Valley Substation, which is the termination point for DV2, is 342 needed. Because the Final EIR/EIS identifies the possibility that additional yards might be 343 required west of Devers, the Valley Yard is consistent with the approved project. However, 344 SCE has recently identified the presence of Stephen's kangaroo rat on this site (via a 345 trapping survey consistent with mitigation measure MM B-7f), and is in the process of 346 finding a different location for the Valley Yard without sensitive biological resources, consistent with MM B-7f and APM B-39 (which require avoidance of Stephen's kangaroo rat 347 348 habitat). Once a suitable replacement location for the Valley Yard is identified and resource evaluations confirm that no biological or cultural resource impacts would be adversely 349 350 affected, SCE will submit additional information to the CPUC on the new Valley Yard

351 location, for approval.

## 352 2.2 Colorado River Switchyard

## 353 2.2.1 Approved Project Element – Midpoint Substation

354 In the DPV2 Final EIR/EIS, the CPUC identified both the DPV2 Midpoint Substation and the DSW Midpoint Substation as environmentally equivalent. In Decision D. 09-11-007 355 356 (CPUC, 2009), the CPUC approved either substation location, and determined that 357 construction of the Midpoint Substation does not trigger the need for additional CEQA 358 review. The Midpoint-Desert Southwest Substation site was ultimately selected by SCE as 359 the location for the CRS. The approved site is located in the southeastern portion of APN 360 No. 879-080-025, which is shown in Figure 5: Colorado River Switchyard Layout (similar to Figure 2-3 of the Final EIS/EIR for the Desert Southwest Transmission Line Project). The 361 362 Final EIS/EIR for the Desert Southwest Transmission Line Project discussed that existing 363 maintenance roads to the Palo Verde-Devers 500 kV Transmission Line would be used to

- provide access to the proposed Midpoint Substation/Switching Station site, and that certain
   road improvements will be required to allow passage of construction vehicles and heavy
- 366 equipment (Imperial Irrigation District, 2005).

367 As approved and discussed in the DPV2 Final EIR/EIS, the DPV2 Midpoint Substation

368 includes buses, circuit breakers, disconnect switches, 108-foot-high dead-end structures, and

369 outdoor night lighting to illuminate the switchrack when manually switched on. A block

diagram of the substation and its main elements is shown in Figure B-18 of the DPV2 Final
 EIR/EIS.

#### 372 2.2.2 Colorado River Switchyard Refinements

#### 373 Minor Shift in Footprint Location

374 The CRS site is a 44-acre site (1,000 feet by 1,900 feet) located in the southeast corner of APN

No. 879-080-025 (see Figure 5: Colorado River Switchyard Layout). When final engineering

is completed, the final location of the switchyard site may shift slightly to the west or north,or be reoriented to accommodate large generator interconnections. Any shift in the site

or be reoriented to accommodate large generator interconnections. Any shift in the site
location would be restricted to the immediate vicinity of the site proposed for the DSW

379 Midpoint Substation, would be surveyed for biological and cultural resources, and would

380 comply with applicable mitigation measures and APMs.

#### 381 Temporary Staging Area

382 A 10-acre temporary staging area adjacent to the CRS site will be required to facilitate

383 construction of the switchyard. This represents an increase in the substation staging area

384 size from the five-acre area that was that described in the DPV2 Final EIR/EIS. The staging

area would be accessible from the existing access road along the switchyard site, but the

final location could still shift and will be determined as a more detailed switchyard design is

387 developed.

#### 388 Distribution (Station Light and Power)

- 389 Although not specifically described in the Final EIR/EIS, power to operate the substation is
- 390 inherent in the Project. A distribution line for station light and power would be extended
- 391 from an existing 33 kV line (located approximately one mile north of the CRS site along an

- 392 existing east-west access road that extends from Blythe Way (to the east). Extension of this
- 393 existing 33 kV line to the site would require installation of approximately 15-20 new wood
- 394 poles and about 2,500 feet of new conductor (between the existing line and the CRS to the
- south). Access to the poles would be created as the poles are installed by utility vehicles as
- they progress along the route. The access way would not be graded (drive and crush only),
- but would remain following line installation for future inspection and maintenance. The
- new poles would disturb approximately 0.01 acre (roughly 25 square feet) per pole. The
- exact alignment would be determined during final substation design. Figure 6: Proposed
- 400 Distribution and Telecom, shows a north-south corridor extending north of the site, which
- 401 represents the general location of the distribution power line extension.
- 402 Access Road Improvements
- 403 An existing unimproved access road (approximately 13 feet wide) lies between the site and
- 404 Wiley Wells Road along the DPV1 line. This access road section is approximately 25,000 feet
- 405 long. This access road would serve as the substation entrance road and would be improved
- to a full 24-foot width with a two-foot-wide shoulder on each side, for a total width of
- 407 approximately 30 feet, including allowances for side slopes and surface runoff control. As a
- 408 note, the DPV2 Final EIR/EIS evaluated the impacts of a new permanent 24-foot-wide, two-
- 409 lane access road between an existing paved road and the DPV2 Midpoint Substation site—a
- 410 distance of approximately three miles.
- 411 Widening and improving the access road would include compacting subsurface soils and
- 412 placing a four-inch-thick layer of asphalt concrete over a six-inch-thick layer of compacted
- 413 aggregate road-base. Given that the existing access road between Wiley Wells Road and the
- 414 CRS site is currently disturbed, the road improvements would result in approximately 9.8
- 415 acres of additional permanent disturbance.

## 416 2.2.3 Environment Effects – CRS Refinements

- 417 The anticipated impacts of the CRS refinements are compared against the impacts discussed418 in the DPV2 Final EIR/EIS.
- 419 The CRS refinements described above are not considered substantial project changes that
- 420 could result in new significant environmental effects or a substantial increase in the severity
- 421 of previously identified significant effects discussed in previously certified California
- 422 Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA)
- 423 documents. The refinements are not expected to affect the resource areas below because
- 424 they are not substantive or because sensitive resources are not present or nearby:
- 425 D.3 Visual Resources (refinements are in a Class III area)
- 426D.5Wilderness and Recreation (no changes that could affect wilderness or recreation427areas)
- 428D.8Noise (no changes that could expose sensitive receptors to construction or<br/>operational noise)
- 430 D.9 Transportation and Traffic (no changes that could result in new traffic impacts)
- 431 D.10 Public Health and Safety (No radio interference, induced currents and shock
  432 hazards, pacemaker effects, wind, earthquake or fire hazards are associated with

433		CRS refinements. But improper handling of hazardous materials during
434		construction is addressed.)
435	D.11	Air Quality (no substantive changes that could affect air quality significance
436		determinations under the Mojave Desert Air Quality Management District)
437	D.13:	Geology, Soil, and Mineral Resources (no substantive changes that could result in
438		new or more severe geology and soils impacts)
439	D.14	Socioeconomics (no changes that could affect population, housing, employment,
440		utilities, or solid waste facilities)
441	However,	further impact comparisons are provided for the following resource areas:
442	D.2	Biological Resources
443	D.4	Land Use
444	D.6	Agricultural Resources
445	D.7	Cultural and Paleontological Resources
446	D.10	Public Health and Safety (No radio interference, induced currents and shock
447		hazards, pacemaker effects, wind, earthquake or fire hazards are associated with
448		CRS refinements. But improper handling of hazardous materials during
449		construction is addressed.)
450	D.12	Hydrology and Water Quality

451 Biological Resources

452 **Final EIR/EIS Discussion.** The Final EIR/EIS evaluated the anticipated impacts to

453 biological resources for the Midpoint Substation as part of the project (approximately 10

454 miles southwest of Blythe), and a second Midpoint substation as part of the Desert

455 Southwest Transmission Project Alternative (approximately 11 miles west of Blythe and

456 five miles northwest of the DPV2 Midpoint substation). The DPV2 Final EIR/EIS analysis

457 determined that use of either site would result in potentially significant impacts to

- 458 biological resources (native vegetation, noxious weeds, nesting birds, desert tortoise,
- 459 sensitive plant habitats, sensitive wildlife habitats, and jurisdictional waters); however,
- those impacts would be mitigated to less than significant levels through implementation of
- 461 numerous mitigation measures (B-1a, B-2a, B-2b, B-5a, B-7b, B-7c, B-8a, B-9b, B-9c, B-9d,
- 462 B-9e, B-9g, B-9h).

463 For both the DPV2 Midpoint Substation and the DSW Midpoint Substation, the same

464 mitigation measures would apply and be equally effective in mitigating potential impacts,

465 even though the two Midpoint Substation sites are located approximately five miles apart.

466 This is because the two sites are characterized by similar habitats and species, and shifting

from one location to the other has minimal, if any, difference in impacts to biological

468 resources and the applicable APMs and mitigation measures. For these reasons, the Final

469 EIR/EIS determined (which was reiterated in Decision D.07-01-040) that both the DPV2

470 Midpoint Substation location and the Desert Southwest Midpoint Substation location are

471 equally environmentally superior/preferable.

#### 472 **Comparison of Potential CRS Refinement Effects.** The minor shift in the footprint location

473 of the CRS, the extension of a distribution line to the CRS (for station light and power), a

474 widened and improved access road (from Wiley Wells Road), and larger staging area would

475 result in impacts to biological resources. However, such impacts would be consistent with 476 the impacts evaluated in the Final EIR/EIS because the refinements are consistent with the 477 project features evaluated in the Final EIR/EIS and because they would affect the same 478 general area and biological resources. In addition, because the same mitigation measures 479 (including measures that apply to access roads) would be applied and would reduce potential impacts to biological resources from the CRS refinements, impacts to biological 480 resources would be of the same type and intensity (less than significant after mitigation) as 481 482 discussed in the Final EIR/EIS. In addition, SCE biologists have surveyed the refinement 483 areas and have coordinated with the U.S. Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG) on 484 485 the affected areas. The subsequent Federal Endangered Species Act Section 7 consultation 486 (resulting in a project-specific Biological Opinion) and State Endangered Species Act Section 487 2080.1 consistency review would include the analysis, affects, and mitigation for the these 488 CRS refinements. As a consequence, the CRS refinements would not result in new 489 significant impacts or greater intensity of impacts.

490 Land Use

491 **Final EIR/EIS Discussion.** Chapter 2 of the Final EIR/EIS described the placement and

492 removal of guard structures along the transmission lines, which are comprised of wooden

poles similar to those that would be required for the extension of the existing distribution

line. The Final EIR discussed land use impacts associated with primary Project structures
 such as towers, and stated that placement of additional towers requires acquisition and

such as towers, and stated that placement of additional towers requires acquisition and
 disturbance of small amounts of additional land area to accommodate the footprint of the

- 497 towers and access roads. Although the Project would require acquisition of a small amount
- 498 of existing land, the affected land uses would not be substantially disrupted. The Final

499 EIR/EIS concluded that land use impacts and land acquisition would result in adverse, but

500 less than significant impacts.

501 **Comparison of Potential CRS Refinement Effects.** The Final EIR/EIS discussed the

potential for right-of-way acquisition for the primary transmission lines and project
elements. The acquisition of a band of right-of-way or easement for the extension of the

- distribution power line from the parcels to the north of the CRS (APN 879-080-016, 879-080-
- 505 017, and 818-222-019) would be of a smaller scale (much smaller width) than the remaining
- 506 right-of-way acquisitions for the towers and transmission line. The majority of project right-
- 507 of-ways have been in place for over 20 years, and very little additional right-of-way is
- required. In addition, consistent with the Final EIR/EIS, the additional right-of-way for the
- 509 distribution line extension represents a small amount of right-of-way that is not expected to
- 510 disrupt land uses.
- 511 Agricultural Resources

512 **Final EIR/EIS Discussion.** The Final EIR/EIS identified the selected CRS site (Midpoint

513 Substation in the Desert Southwest Transmission Project Alternative) as being in an area not

- 514 mapped for important farmland (D.6-46). The Final EIR/EIS identified an impact to
- agricultural resources based on the placement of towers (and pulling/splicing of
- 516 transmission lines) in the agricultural areas around Blythe, for the section of transmission
- 517 line east of the Midpoint Substation (between the Midpoint Substation and the Colorado
- 518 River).

- 519 **Comparison of Potential CRS Refinement Effects.** The shift in the footprint of the CRS,
- 520 access road improvements, distribution line extension, and expanded staging area would
- not result in new or more severe impacts to agricultural resources than described in the
- 522 Final EIR/EIS because no such resources are in the area.
- 523 Cultural and Paleontological Resources

524 Final EIR/EIS Discussion. The Final EIR/EIS identified a potential for significant impacts (from ground-disturbing activities) to known and unknown historic properties and 525 archaeological resources. The Final EIR/EIS also stated that adverse effects to individual 526 527 sites cannot be precisely identified for all project areas until the final route is selected. 528 specific tower locations are determined, detailed engineering plans for all project roads and 529 facilities are completed, and final National Register of Historic Places (NRHP) eligibility of cultural resources has been assessed. The Final EIR/EIS also stated that in many cases, 530 531 direct impacts may be avoided through minor design modifications and project effects 532 would be reduced to a less than significant level (Class II) by avoidance and protection 533 measures listed in Mitigation Measures C-1a (Inventory and evaluate cultural resources in 534 Final Area of Potential Effect [APE]) and C-1b (Avoid and protect potentially significant 535 resources). In addition, if cultural resources are identified through additional surveys or construction activities, then Mitigation Measures C-1c (Develop and implement Historic 536 537 Properties Treatment Plan), C-1d (Conduct data recovery to reduce adverse effects), C-1e 538 (Monitor construction), and C-1f (Train construction personnel), were required to be

- implemented by the Applicant to facilitate discovery, evaluation, and treatment of unknown
- 540 buried prehistoric and historical archaeological sites.
- 541 The Final EIR also stated that if direct impacts to NRHP properties eligible under Criterion
- 542 d (significant data potential) are unavoidable, mitigation through data recovery would
- reduce impacts, but, under the National Historic Protection Act (NHPA) regulations, effects
- 544 would still be considered adverse (Class I). Likewise, for properties eligible for the NRHP
- 545 under Criteria a, b, or c, data recovery could not reduce impacts to a less than significant
- 546 level (Class I) and effects would be considered adverse. Further, potential impacts to
- 547 archaeological resources are identified because unanticipated sites, features, and/or
- 548 artifacts, and potentially Native American human remains or sacred features could be
- 549 discovered as a result of construction, and those are determined to be potentially significant.
- 550 The Final EIR/EIS applied mitigation measures MM C-1a to MM C-1f and MM C-2a, but
- 551 concluded that if direct impacts to NRHP properties eligible under Criterion d (significant
- data potential) are unavoidable, mitigation through data recovery would reduce impacts,
- but under the NHPA regulations, effects would still be considered adverse (Class I).
- 554 Likewise, for properties eligible for the NRHP under Criteria a, b, or c data recovery could
- not reduce impacts to a less than significant level (Class I) and effects are considered
- 556 adverse.
- 557 The Final EIR/EIS stated that the BLM, as the Federal Lead Agency under NEPA, has
- 558 initiated required government-to-government consultation with appropriate Native
- 559 American groups and notification to other public groups regarding project effects on
- 560 traditional cultural values, and that this consultation will determine whether there are
- 561 Traditional Cultural Properties (TCPs) along this alternative to the Project that could be
- affected and the significance of any project effects. Implementation of Mitigation Measure

- 563 C-3a (Complete consultation with Native American and other Traditional Groups) should
- reduce impacts to TCPs to a level that is less than significant (Class II).

565 Comparison of Potential CRS Refinement Effects. The minor shift in the footprint location 566 of the CRS, the extension of a distribution line to the CRS (for station light and power), an 567 expanded laydown area, and a widened and improved access road (from Wiley Wells Road) 568 to the site could result in impacts to cultural resources if such resources are present within 569 the area of disturbance. However, these refinements are consistent with the project features

- 570 evaluated in the Final EIR/EIS in that they would affect the same general area, and could
- 571 similarly affect unknown archaeological resources. The same mitigation identified in the
- 572 Final EIR/EIS would apply, as would the same impact determinations. These project
- 573 refinements related to the CRS would not affect known historic properties.
- 574 Similarly, for the CRS refinements, applicable mitigation that would occur for
- 575 paleontological resources, as described in the Final EIR/EIS, would be implemented. As a
- 576 consequence, the CRS refinements would not result in new significant impacts or greater
- 577 intensity of impacts to paleontological resources than identified in the Final EIR/EIS.
- 578 Public Health and Safety

579 **Final EIR/EIS Discussion.** The Final EIR/EIS identified the potential for the soil

580 contamination from improper handling and/or storage of hazardous materials during

- 581 construction, and applied mitigation measures P-1a though P-1d to mitigate potential
- 582 impacts to a less than significant level.
- 583 Comparison of Potential CRS Refinement Effects. The CRS refinements are consistent with
  584 the project elements described in the Final EIR/EIS, in that the same mitigation measures
  585 and impact determination would apply to the refinements. Therefore, the CRS refinements
  586 would not result in new or more severe impacts than described in the Final EIR/EIS.

Final EIR/EIS Discussion. The Final EIR/EIS stated that soil contamination could result
from accidental spills or releases of hazardous materials at the proposed Midpoint
Substation during facility operations, which could potentially result in exposure of facility
and maintenance workers and the public to hazardous materials. The Final EIR/EIS applied
Mitigation Measure P-4a to reduce potential impacts to workers and the public to less than

592 significant levels (Class II).

593 **Comparison of Potential CRS Refinement Effects.** Shifting of the CRS footprint and using 594 a larger staging area than described in the Final EIR/EIS would not affect the EIR/EIS' 595 impact determination, and neither would other CRS refinements. Therefore, the CRS 596 refinements are consistent with the project elements and impacts described in the Final 597 EIR/EIS, and would not result in new or more severe impacts than described in the Final 598 EIR/EIS.

- 599 Hydrology and Water Quality
- 600 Final EIR/EIS Discussion. The Final EIR/EIS identified the potential for hazardous
- 601 materials spills during construction to affect water quality. The Final EIR/EIS applied
- 602 mitigation measures P-1a though P-1d to reduce potential impacts to a less than significant
- 603 level.

- 604 The Final EIR/EIS also identified the potential for accidental release of oil associated with
- the Midpoint Substation to significantly affect surface or groundwater quality. However, the
- 606 Final EIR/EIS applied mitigation measure P-4a to reduce such impacts to a less than
- 607 significant level.
- 608 **Comparison of Potential CRS Refinement Effects.** Regarding the potential for hazardous
- 609 material spills during construction to affect water quality, the CRS refinements are
- 610 consistent with the project elements described in the Final EIR/EIS, and the same APMs and
- 611 mitigation measures would apply to the refinements. Therefore, the CRS refinements would
- 612 not result in new or more severe impacts than described in the Final EIR/EIS.
- 613 Although the CRS footprint would shift locations, this would not affect the potential for oil
- spills from equipment at the CRS. No other CRS refinement would have the potential to
- 615 result in oil spills. Therefore, the CRS refinements would not result in new or more severe
- 616 impacts than described in the Final EIR/EIS.

## 617 2.3 Telecommunication System Refinements

### 618 2.3.1 Approved Project Element – Telecommunication System

- As approved and as described in the DPV2 Final EIR/EIS (CPUC, 2006), new
- 620 telecommunications facilities are required to increase reliability of the microwave system
- 621 between SCE and Arizona Public Service, and to provide back-up telecommunication
- 622 services for the 500 kV transmission line. The new telecommunication facilities were listed
- 623 in Table B-5 of the Final EIR/EIS, and include two fiber optic systems from the Midpoint
- 624 Substation.
- 625 Specific to the Midpoint Substation, the Final EIR/EIS states that a new telecommunications
- facility will be installed at the Midpoint Substation site to provide microwave and fiber
- 627 optic communications needed for the protective relaying and special protection system
- 628 (SPS); this includes a mechanical equipment room and a telecommunications room. Three
- new microwave paths are included and require a microwave tower onsite. The approved
- 630 project includes two fiber optic systems at the Midpoint Substation.

### 631 2.3.2 Telecommunication System Refinements

- 632 Two telecommunication (telecom) lines would extend from the CRS, one to the southeast
- and the second to the north and east. Although consistent with the Final EIR/EIS, the
- refinements described here provide more detailed information than was included in the
- 635 Final EIR/EIS. These routes are preliminary and may change as field surveys occur and the
- design of the telecommunication system progresses. With the approval of the California-
- 637 only portion of the project, there is a need to provide a telecom link between the CRS and
- 638 the existing Blythe Service Center.
- 639 The southeast telecom line would extend from the CRS for about 5.5 miles along the existing
- 640 DPV1 towers to approximately Tower M123-T1 where it would transition to new and
- 641 existing poles located along an existing east-west patrol road. It would then be routed to the
- bottom of the mesa and along existing streets in the Palo Verde Valley to the Blythe Service
- 643 Center (approximately 14 miles).

644 The portion of the southeast telecom line along the existing DPV1 towers would be OPGW,

- and the remaining line to be installed on wood poles (new and existing) would be fiber optic
- cable. The OPGW would be installed utilizing pulling/splicing sites along the DPV1 right-
- 647 of-way. For the portion of the southeast telecom line east of the DPV1 right-of-way, wood
- 648 poles would be installed from the DPV1 right-of-way (about five miles southeast of the
- substation site) until existing poles can be utilized. The detailed alignment of the
- 650 southeastern telecom line will be defined during more detailed engineering. The total
- disturbance area is not expected to exceed about 0.06 acre (approximately 100 poles at 25
- 652 square feet each).
- The northern telecom line from the CRS would connect with the Buck Substation located to
- the northeast of the CRS. Two options are available for this telecom line. Under Option 1,
- 655 the fiber optic line would be installed on the same poles as the 33 kV line extension
- 656 (distribution power line extension) that would be extended to the CRS (from the north). The
- telecom line would then be installed on existing poles (along an existing access road, Blythe
- 658 Way, north across I-10 to Hobson Way) to the Buck Substation. Several locations would be
- 659 installed in underground conduit along the existing roadways. This option would not
- 660 require new poles or additional ground disturbances to undisturbed areas. This is the
- 661 preferred option for the northern telecom line from the CRS.
- 662 Under Option 2, the telecom line would extend from the CRS as OPGW along the existing
- 663DPV1 towers to Wiley Wells Road, as fiber optic line on existing poles along Wiley Wells
- Road to the north, and eastward on existing poles along the existing east-west access road
- 665 (Blythe Way extended). The fiber optic line would then follow the same route east and north
- to the Buck Substation, as described for Option 1. For installation of the OPGW,
- approximately two pulling/splicing sites would be required along the existing right-of-way
- between CRS and Wiley Wells Road. Minor underground conduit would be installed
- between the OPGW tower and the existing wood poles along Wiley Wells Road.

## 670 2.3.3 Environment Effects – Telecommunication System Refinements

- 671 The telecommunications refinements are not expected to affect the majority of resource
- areas because they are not substantive or because sensitive resources are not present or
- 673 nearby. However, further impact comparisons are provided for the biological, agricultural,
- 674 and cultural resources, as well as public health and safety.

## 675 Biological Resources

- 676 **Final EIR/EIS Discussion.** The Final EIR/EIS evaluated the anticipated impacts to
- 677 biological resources for the transmission line and other project elements, and determined
- 678 that they would result in potentially significant impacts to biological resources (native
- 679 vegetation, noxious weeds, nesting birds, desert tortoise, sensitive plant habitats, sensitive
- 680 wildlife habitats, and jurisdictional waters); however, those impacts would be mitigated to
- 681 less than significant levels through implementation of numerous mitigation measures (B-1a,
- 682 B-2a, B-2b, B-5a, B-7b, B-7c, B-8a, B-9b, B-9c, B-9d, B-9e, B-9g, B-9h). The proposed telecom
- 683 lines from the CRS would result in lower levels of impacts to biological resources than the
- transmission lines and other project elements due to the relatively small level of physical
- 685 disturbances associated with the telecom lines.

- 686 Comparison of Potential Telecommunication System Refinement Effects. The
- telecommunications lines would result in impacts to biological resources. However, such
- 688 impacts would be consistent with the impacts evaluated in the Final EIR/EIS because they
- are consistent with the project features evaluated in the Final EIR/EIS and because they
- 690 would affect the same general area and biological resources. In addition, because the same
- 691 mitigation measures would be applied and would reduce potential impacts to biological
- resources, impacts to biological resources would be of the same type and intensity (less than
- 693 significant after mitigation) as discussed in the EIR/EIS. In addition, SCE biologists have
- 694 coordinated with the U.S. Bureau of Land Management (BLM) regarding the potentially
- affected areas. The subsequent Biological Opinion would include the disturbance areas
- associated with the telecommunication lines. As a consequence, the telecommunicationrefinements would not result in new significant impacts or greater intensity of impacts.
- 698 Agricultural Resources
- 699 **Final EIR/EIS Discussion.** The Final EIR/EIS identified an impact to agricultural resources
- based on the placement of towers (and pulling/splicing of transmission lines) in the
- agricultural areas around Blythe for the section of transmission line east of the Midpoint
- 702 Substation (between the Midpoint Substation and the Colorado River).

703 Comparison of Potential Telecommunication System Refinement Effects. The northern

- telecom route options would not result in new or more severe impacts to agricultural
- resources than described in the Final EIR/EIS because no such resources are in the area.
- 706 Although the telecom line (Southeast Line) between the CRS and the Blythe Service Center
- 707 would traverse the same general area as described in the Final EIR/EIS, this telecom line
- vould not be placed on new towers on agricultural lands. Rather, new wood poles would
- be installed within or along the existing street rights-of-way, and the line would be placed
- on these new poles and on existing poles along existing streets or roads among the
- agricultural areas south of Blythe. Line installation would occur from the pole locations
- vithin the existing right-of-ways and would also not affect agricultural lands. Therefore, the
- telecom refinements would not affect agricultural lands and would not result in new
- significant impacts or a greater intensity of impacts to such resources, than described in the
- 715 certified Final EIR/EIS.
- 716 Cultural and Paleontological Resources
- **Final EIR/EIS Discussion.** The same general cultural resources impact discussions in the
- Final EIR/EIS described in Section 2.2.3 above also apply to the telecommunication system.
- 719 Comparison of Potential Telecommunication System Refinement Effects. The
- telecommunication lines extending from the CRS could result in impacts to cultural
- 721 resources if such resources are present within the area of disturbance. However, these
- refinements are consistent with the project features evaluated in the Final EIR/EIS in that
- they would affect the same general area, and could similarly affect cultural resources. The
- telecom line alignment could be further refined based on compliance with applicable
- mitigation measures. The same mitigation identified in the Final EIR/EIS would apply, as
- would the same impact determinations. Similarly, applicable mitigation that would occur
- 727 for paleontological resources, as described in the Final EIR/EIS, would be implemented. As
- a consequence, the telecommunication line refinements would not result in new significant

impacts or greater intensity of impacts to paleontological resources than identified in theFinal EIR/EIS.

#### 731 **Public Health and Safety**

Final EIR/EIS Discussion. The Final EIR/EIS identified the potential for health hazards
associated with potential exposure of construction workers and the public to contaminated
soil and/or groundwater (pesticide and herbicide contaminants) in agricultural areas, and
applied APM W-3, APM W-11, and mitigation measure P-2a to reduce impacts to a less than
significant level.

737 **Comparison of Potential Telecommunication System Refinement Effects.** The southeast 738 telecommunication line has the potential for similar public health and safety impacts 739 (worker exposure to pesticides) related to the installation of wood poles for the 740 telecommunication line along roadways in the Palo Verde Valley. For this section of the 741 telecommunication line, a similar potential impact exists as described in the Final EIR/EIS, 742 and the same APMs and mitigation measures would apply. The telecommunication 743 refinements are consistent with the project elements and impacts described in the Final EIR/EIS, and therefore would not result in new or more severe impacts than described in 744 745 the Final EIR/EIS.

## 746 2.4 Transmission Line Towers – Increased Tower Heights

#### 747 2.4.1 Approved Project Elements – Tower Heights

As approved and described in the DPV2 Final EIR/EIS, approximately 389 towers would be 748 749 constructed between the Devers Substation and the Colorado River Substation, with the 750 majority of the towers being single-circuit lattice steel towers. The single-circuit lattice steel 751 tower heights analyzed in the DPV2 Final EIR/EIS for both the California portion (Colorado 752 River to Devers Transmission Line or CR-D) of the Devers-Harquahala transmission line, 753 and the DV2 Alternative towers were based, in part, on a typical height of approximately 754 150 feet tall. Table 1 (Tower Heights Table) in Appendix 3 of the Final EIR/EIS showed the 755 proposed tower heights along the Project route. The tower structures ranged from 756 approximately 95 to 221 feet tall. The heights were expected to vary depending upon the 757 specific terrain, span length, presence of other facilities, topography, or other features that 758 the transmission line could cross. For the 42-mile DV2 Alternative line, which will connect 759 the existing Devers Substation near Palm Springs, California, to the existing Valley 760 Substation n Menifee, California, two types of transmission towers would be constructed: 761 lattice steel towers, and tetra-steel towers. As approved and as described in the DPV2 Final 762 EIR/EIS, approximately 131 towers constructed for this line would be single-circuit lattice 763 steel towers and approximately 12 towers would be single-circuit tetra-steel towers. The 764 steel lattice towers would be typically 150 feet tall and the tetra-steel towers would typically 765 be 128 feet tall.

- 766 The heights of the structures would vary depending upon the specific terrain, span length,
- 767 presence of other facilities, topography, or other features that the transmission line may
- 768 cross, such as rivers, roads, highways, railroads, telephone lines, and other power
- 769 transmission and distribution lines.

- The new towers would generally be aligned horizontally with the existing towers as much
- as feasible. The Final EIR/EIS also acknowledged that the tower heights could increase due
- to technical requirements. The tower spacing may not correspond exactly to the DPV1
- structures in order to provide adequate conductor ground clearance. Minimum conductor
- height must be at least 35 feet above the ground for the 500 kV line.
- 775 Furthermore, as stated in the Proponent's Environmental Assessment, "the ISO has
- specified that the capacity of the line be 2,700 amps under normal conditions and
- 777 3,600 amps under emergency conditions, based on a 275 degree conductor temperature. This
- capacity rating is an increase from the 1988 DPV2 capacity rating. This new capacity rating
- often necessitates that the heights of some of the proposed towers be slightly taller, and in
- some locations tower spacing may not correspond to the adjacent DPV1 structures, to
- 781 provide adequate ground clearance" (Proponent's Environmental Assessment, p. 6-31
- 782 [CPUC, 2006]).
- 783 In the Final Decision for the DPV2 (07-01-040), the CPUC evaluated the use of taller towers
- to reduce EMF near the right-of-way where residences are located nearby. Specifically, the
- 785 CPUC examined increasing tower and conductor heights by an estimated 20 feet to reduce
- magnetic fields (consistent with the CPUC's guidance in D.06-01-042 for low-cost EMF
- 787 mitigation). The CPUC determined that the increase in tower and conductor heights (by
- approximately 20 feet on a 150-foot tower) would be unnoticeable to most observers (07-01-
- 789 040, page 88).

### 790 2.4.2 Tower Height Refinements

791 The new towers would generally be aligned horizontally with the existing towers where

- feasible. Since D.09-11-007, SCE has made changes to the tower heights to reflect current
   GO95 conductor clearance requirements at the higher ISO conductor temperature (of 275
- degrees instead of the former 215 degrees). As a consequence, the heights of some towers
- 795 will be slightly taller than the adjacent DPV1 towers (some will also be lower than existing
- 796 DPV1 towers due to terrain or other considerations. Also, the tower spacing may not
- 797 correspond to the DPV1 structures to provide adequate conductor ground clearance. The
- 798 minimum conductor height would be at least 35 feet above the ground for the 500 kV lines.
- 799 Based on in-field tower walks (for detailed tower siting) and recent engineering design of
- 800 the towers (including conductor clearance based on higher ISO conductor temperature), the
- 801 new CR-D towers are projected at an average height of 152 feet, and range from 89 feet to
- 802 236 feet tall. For comparison, the existing DPV1 towers are an average of 136 feet tall and
- 803 range from 84 feet to 236 feet tall.
- 804 The new DV2 towers are projected to average approximately 148 feet tall, and range in
- height from 85 feet to 278 feet, as compared to the existing DV1 towers, which average 132
- 806 feet tall, and range in height from 79 feet to 278 feet. While there is an overall increase in
- 807 average tower height, each tower height differs compared to the existing towers based on
- 808 engineering requirements, tower site constraints, terrain/topography, and current clearance
- 809 requirements based on a higher ISO conductor temperature (of 275 degrees instead of the
- 810 former 215 degrees).

## 811 2.4.3 Environmental Effects – Tower Height Refinements

812 As analyzed in the DPV2 Final EIR/EIS (Section D), 13 environmental resource areas were

813 discussed. Of the 13 resource sections, six did not address impacts from tower heights.

814 Those environmental resource areas include: (1) D.7 Cultural Resources, (2) D.8 Noise, (3)

- 815 D.11 Air Quality, (4) D.12 Hydrology and Water Quality, (5) D.13 Geology, Soil and Mineral
- 816 Resources, and (6) D.14 Socioeconomics. Based on the revised tower heights described
- 817 above, impacts to these six environmental resource areas will not change.
- 818 Four sections within the Final EIR/EIS [(1) D.2 Biological Resources, (2) D.4 Land Use and
- Planning, (3) D.6 Agriculture, and (4) D.10 Public Health and Safety] did not address tower
- heights specifically, nor was there an impact associated with tower heights in these sections.
- 821 Each of these sections did however reference a mitigation measure or APM related to
- towers. These measures would apply to the project regardless of increases in tower heights.
  The measures include AG-4a: Locate transmission towers and pulling splicing stations to
- avoid agricultural operations, and APM V-9: Towers would be located adjacent to existing
- structures where feasible. Based on the changes in the tower heights described above,
- impacts to these four environmental resource areas would not change and no additional
- 827 mitigation measures are necessary.
- 828 Further impact comparisons are provided for the following resource areas:
- 829 D.3 Visual Resources
- 830 D.4 Wilderness and Recreation
- 831 D.8 Transportation and Traffic

## 832 Visual Resources

Final EIR/EIS Discussion. As discussed within Section D.3 Visual Resources of the Final
EIR/EIS, the study area was defined by numerous viewpoints from which the Project would
be seen. The viewshed was extensive given the relative openness of much of the landscape,
the height of the proposed structures, and the availability of viewing opportunities from

- 837 travel routes, recreational use areas, and nearby residential and commercial areas.
- 838 In general, the Visual Resources technical approach was differentiated according to:
- 839 (1) federal lands administered by the BLM, and (2) other federal (non-BLM), non-federal
- 840 public and private lands. The technical approach for that portion of the project where lands
- are subject to administration by the BLM was based on the BLM's Visual Resource
- 842 Management (VRM) system. This is a system that BLM requires for use on BLM
- administered lands (located primarily along the eastern portion of the Project) but cannot be
- applied to non-BLM lands because the designations of Visual Resource Management
- 845 (VRM) classes needed to apply this system do not exist. The non-BLM portions of the project
- 846 were analyzed using the Visual Sensitivity–Visual Change system developed by the CPUC's
- 847 visual resources consultant.
- 848 Detailed visual impact analyses were conducted at key viewpoints and the necessary photo-
- 849 documentation was obtained to serve as the foundation for photosimulations of the project
- 850 features. The photosimulations served as valuable tools in the evaluation of anticipated
- 851 project effects. The viewpoints that were analyzed for the Project include Chuckwalla Valley
- 852 (BLM land), Alligator Rock Area of Critical Environmental Concern (ACEC) (BLM land),

- 853 Orocopia Mountains (BLM land), Cottonwood Springs Road/Joshua Tree National Park
- 854 (BLM land), views from residential development of I-10 from the Terra Lago residential and
- Golf Development (non-BLM), views from the Coachella Valley Preserve (BLM land), San 855
- 856 Jacinto and Santa Rosa Mountains (BLM land), views from the Snow Creek Village
- 857 residential community (non-BLM), views from state-designated scenic highway SR243 (non-
- BLM), views from Mapes Road (non-BLM), views from the residential community of 858
- Cabazon (non-BLM), Potrero ACEC (BLM land), and views from the San Bernardino 859
- National Forest (non-BLM). 860
- 861 In summary, the Final EIR/EIS made two impact determinations for visual resources related
- to tower heights. The first impact determination is less than significant (Class III), because 862
- the towers would be of similar scale and design and would be paired to existing towers. 863 Many of the viewpoints between the Devers Substation and the Colorado River are within
- 864
- 865 BLM land and are ranked with a VRM Class III objective. Although the towers would increase the structural complexity and industrial character of the area, this change would 866
- 867 not dominate the views from the casual observer, which is consistent with BLM VRM
- 868 Class III objective. Although this would increase the structural complexity and industrial 869 character of the area, the overall visual impact to the casual observer would be low-to
- 870 moderate. While the impacts would be less than significant, mitigation was recommended
- under NEPA. With implementation of recommended Mitigation Measure V-3a, many of 871
- 872 these impacts would be reduced.
- 873 The second impact determination to visual resources from tower heights is significant,
- 874 which cannot be mitigated to a level that is less than significant (Class I). This determination
- 875 was made for all of the viewpoints along the Devers Valley No. 2 Alternative, and the
- 876 viewpoint near the Alligator Rock ACEC. Although the additional towers would appear
- 877 similar in design and scale to that of the existing towers, the additional skylining, view
- 878 blockage, and increased structural prominence would result in a moderate or moderate-to-
- 879 high degree of visual contrast because of the proximity of the towers to the viewpoints.
- 880 Even with implementation of mitigation measures V-40a, V-40b, and V-40c recommended to
- 881 lessen visual impacts, impacts are still significant and unavoidable (Class I).
- 882 Comparison of Potential Tower Heights Refinement Effects. Section D.3 of the Final
- 883 EIR/EIS identified Class I visual resource impacts along various viewpoints in sensitive
- areas, based on high visual exposure of the towers from several of the viewpoints listed 884
- 885 above. The Class I impact was a result of the towers that introduced a moderate degree of
- 886 visual contrast in close proximity to the sensitive viewpoints analyzed. With increased
- 887 tower heights, the findings of significant project impacts in these areas would remain
- 888 unchanged.
- 889 For the Class III visual resource impacts, the increase of tower heights described above will
- 890 remain unnoticeable to most viewers according to the CPUC's statement in the Final
- 891 Decision. Therefore, the increases in tower heights of approximately 20 feet (tower height
- 892 refinements) would not represent significant changes from the Project analyzed in the Final
- EIR/EIS. 893
- 894 For tower height refinements greater than 20 feet in Class III areas as identified in the Final
- EIR/EIS, significant visual resource impacts are not anticipated due to the still relatively 895
- 896 small and incremental change in tower height, the effects of terrain or topography, and the

- 897 relatively low visual sensitivity of the BLM VRM Class III areas. In the areas with BLM VRM
- 898 Class III designations, a moderate degree of visual change is allowed that may attract
- attention, just so long as it does not dominate the view of the casual observer. The increased 899
- 900 tower heights would not change the overall visual impact determination because they
- 901 would be consistent with the moderate degree of visual contrast allowed within these Class
- 902 III areas (low visual sensitivity). The Final EIR/EIS imposed Visual Resource mitigation
- 903 measures V-3a, V-40a, V-40b, V-40c, and AG-4a on the project in these areas of less than
- 904 significant impact to provide for further reduction of impacts, and these measures will 905 continue to be imposed.
- 906 Wilderness and Recreation
- 907 Final EIR/EIS Discussion. Impacts from tower heights were evaluated in Section D.5
- 908 (Wilderness and Recreation) and Section D.3 (Visual Resources) of the Final EIR/EIS. As
- 909 discussed in Section D.5, the new transmission line would increase the structural complexity
- 910 and industrial character visible from the several access roads within the Alligator Rock
- 911 ACEC and Coachella Valley Fringe-Toed Lizard ACEC. Overall, development and
- 912 operation of the project would change the character of the ACECs and would significantly
- diminish their recreational value. Impacts to the Alligator Rock, Coachella Valley Fringe-913
- 914 Toed Lizard ACEC and Chuckwalla Valley Dune Thicket ACECs would be significant and
- 915 unmitigable (Class I). No mitigation measures were identified that would reduce the
- 916 industrial development of the Project across the Alligator Rock and Chuckwalla Valley
- 917 Dune Thicket ACECs. The impacts from towers are considered significant, even with
- 918 implementation of other mitigation measures.
- 919 **Comparison of Potential Tower Heights Refinement Effects.** The impacts evaluated in the Final EIR/EIS are based on adding a new transmission line parallel to the existing DPV1 920 921 transmission line to the setting. Increasing the tower heights of DPV2 in the wilderness and 922 recreation areas identified in the Final EIR/EIS sensitive would result in the same types of 923 impacts as identified in the Final EIR/EIS, and would thus not change the significance level.
- 924 **Transportation and Traffic**
- Final EIR/EIS Discussion. The DPV2 Final EIR/EIS discussed that the presence of large 925
- 926 cranes and new towers could potentially affect aviation activities associated with airports in
- 927 the vicinity, if they were to extend more than the approved height above the ground surface
- 928 (158 feet). However, pursuant to Federal Aviation Administration (FAA) guidelines, SCE
- 929 would be required to submit FAA Form 7460-1, Notice of Proposed Construction or
- 930 Alteration, to the Manager of the FAA Air Traffic Division for review and approval of the
- 931 project. Adherence to FAA guidelines would insure that construction and operation of the
- 932 Project would not cause a significant impact to aviation activities (Class III).
- 933 **Comparison of Potential Tower Heights Refinement Effects.** The increase in tower heights 934 would not create new significant effects from those identified in the Final EIR/EIS, and the 935 same FAA review would apply. Consistent with the Final EIR/EIS, adherence to FAA 936 guidelines would ensure that construction and operation of the tower height refinements 937
- would not cause a significant impact to aviation activities. Therefore, the tower height
- 938 refinements would not result in new or more severe impacts to aviation activities than
- 939 previously evaluated in the DPV2 Final EIR/EIS.

## 2.5 Devers to Valley No. 1 Transmission Line Relocation

941 The DV2 Alternative would be located parallel to and south of the existing DV1.

#### 942 2.5.1 Approved Project Elements – Minor DV1 Relocation

- 943 The Final EIR/EIS stated that there could be tower improvements to the existing DV1 line.
- 944 The Devers-Valley No. 2 Alternative described in the Final EIR/EIS included two options
- 945 for transmission tower siting near the existing Devers-Valley Tower DV-59.
- 946 Option 1 would be to continue parallel to the existing DV1 transmission line, with the new947 DV2 tower installed approximately 130 feet south of the existing Tower DV-59.
- 948 Option 2, the current design plan, would require the removal of an existing DV1 tower
- 949 (Tower DV-59, located at the southern end of Orange Street) in order to re-route the existing
- 950 Devers Valley No. 1 and No. 2 lines approximately 500 feet to the north.

## 951 2.5.2 Tower Refinements for Minor DV1 Relocation (Cabazon Relocation)

- 952 The DV2 line will be routed to the north of the NW ¼ of NE ¼ of Section 20 to land owned
- 953 by SCE, consistent with Option 2 described in the Final EIR/EIS. Because DV2 is located to
- the south of the existing DV1 transmission line, the routing of DV2 north of and around this
- property would require crossing the existing DV1 line. Due to clearance requirements, the
- existing DV1 line will therefore also be rerouted north around this properties to other
- 957 property owned by SCE.
- 958 The rerouting of DV1 in this area would require the removal of three existing towers along
- 959 the DV1 line (instead of the one tower described in the Final EIR/EIS) and installation of
- 960 four new dead end structures (See Figure 5: Cabazon Relocations [DV1]). Associated pulling
- 961 stations would also be required.

## 962 2.5.3 Environmental Effects – Minor DV1 Relocation

- 963 The removal of three existing DV1 towers and construction of four new DV1 towers 964 approximately 500 feet to the north is not considered to be a substantial project change that
- 965 could result in new significant environmental effects or a substantial increase in the severity
- 966 of previously identified significant effects because they represent minor changes in locations
- 967 of the types of structures and construction disturbances already evaluated for the project.
- 968 With the possible exception of biological resources and cultural resources, which could have
- site specific concerns, this refinement is not expected to substantively affect the impact
- 970 determination for any resource area described in the Final EIR/EIS because the new tower
- 971 locations would be in a similar setting just 500 feet to the north and would occur on existing
- 972 SCE-owned property.
- 973 Biological Resources
- 974 Final EIR/EIS Discussion. The Final EIR/EIS evaluated the anticipated impacts to
- 975 biological resources along the Devers-Valley No. 2 Alternative and applied mitigation (B-1a,
- 976 B-2b, B-5a, B-6a, B-7b, B-7c, B-7e, B-7f, B-8a, B-9a, B-9b, B-9d, B-9e, B-9f, B-9h, B-13a, B-13b,
- 977 B-15a, B-16a, and B-18a) to reduce impacts to below a level of significance.

- 978 Comparison of Potential Effects of the Tower Refinements to Relocated DV1. Because the
- 979 new tower locations would be located in the same immediate area as the existing towers
- and the future DV2 line, no change in impact determination is expected, and applicable
- 981 mitigation is expected to reduce potential impacts to biological resources to below a level of
- 982 significance. In addition, the tower siting process for these refinements have recently been
- 983 completed and reviewed by SCE biologists. Based on this detailed review of biological
- 984 resources, the four new DV1 towers required to accomplish this minor relocation
- 985 (compared to the one new tower described in the Final EIR/EIS for this work) are not 986 expected to result in new significant impacts or more severe impacts than previously
- 986 expected to result in new significant impacts of more severe in 987 discussed.
- 988 Applicable mitigation for the DV1 refinements that would occur for biological resources, as
- 989 described in the Final EIR/EIS, would be implemented. As a consequence, the DV1
- 990 refinements would not result in new significant impacts or greater intensity of impacts to
- 991 biological resources than identified in the Final EIR/EIS.
- 992 Cultural and Paleontological Resources
- 993 Final EIR/EIS Discussion. The DPV2 Final EIR/EIS stated that NRHP-eligible sites may be 994 identified when additional intensive surveys are completed following final project design, 995 and that unavoidable direct impacts may occur to known archaeological resources within 996 and in the vicinity of the project area during construction. Adverse effects to individual sites 997 cannot be precisely identified for all project areas until the final route is selected, specific 998 tower locations are determined, detailed engineering plans for all project roads and facilities 999 are completed, and final NRHP eligibility of cultural resources has been assessed. The DPV2 1000 Final EIR/EIS also stated that in many cases, direct impacts may be avoided through minor 1001 design modifications and project effects would be reduced to a less than significant level 1002 (Class II) by the avoidance and protection measures listed in Mitigation Measures C-1a 1003 (Inventory and evaluate cultural resources in Final APE) and C-1b (Avoid and protect 1004 potentially significant resources). In addition, if cultural resources are identified through 1005 additional surveys or construction activities, then Mitigation Measures C-1c (Develop and implement Historic Properties Treatment Plan), C-1d (Conduct data recovery to reduce 1006 1007 adverse effects), C-1e (Monitor construction), and C-1f (Train construction personnel) shall 1008 be implemented.
- 1009 The DPV2 Final EIR/EIS also discloses that if direct impacts to NRHP properties eligible 1010 under Criterion d (significant data potential) are unavoidable, mitigation through data 1011 recovery would reduce impacts, but, under the NHPA regulations, effects would still be 1012 considered adverse (Class I). Likewise, for properties eligible for the NRHP under Criteria a, 1013 b, or c data recovery could not reduce impacts to a less than significant level (Class I) and 1014 effects would be considered adverse. Further, potential impacts to archaeological resources 1015 are identified because unanticipated sites, features, and/or artifacts, and potentially Native
- 1015 are identified because unanticipated sites, features, and/or artifacts, and potentially Native 1016 American human remains or sacred features could be discovered as a result of construction,
- 1017 and those are determined to be potentially significant.
- 1018 The Final EIR/EIS applied mitigation measures MM C-1a to MM C-1f and MM C-2a, but
- 1019 concluded that if direct impacts to NRHP properties eligible under Criterion d (significant
- 1020 data potential) are unavoidable, mitigation through data recovery would reduce impacts,
- 1021 but under the NHPA regulations, effects would still be considered adverse (Class I).

- 1022 Likewise, for properties eligible for the NRHP under Criteria a, b, or c data recovery could
- not reduce impacts to a less than significant level (Class I) and effects are consideredadverse.
- 1025 Comparison of Potential Effects of Tower Refinements to Relocated DV1. The removal of
- 1026 existing towers and construction of new towers along DV1 for this minor relocation could
- 1027 result in impacts to cultural resources (if such resources are present along the area of
- 1028 disturbance).
- 1029 Because the Final EIR/EIS discloses the potential for both Class I and Class II impacts to
- 1030 cultural resources, cultural impacts of the tower refinements to relocate DV1 would be of
- 1031 the same type and intensity as discussed in the Final EIR/EIS. The same mitigation
- 1032 measures (as the Project) would be applied to reduce potential impacts to unknown cultural
- 1033 resources from these tower refinements, and no changes in significance determinations to
- 1034 cultural resources would occur.
- 1035 Similarly, applicable mitigation for the DV1 relocation refinements that would occur for
- 1036 paleontological resources, as described in the Final EIR/EIS, would be implemented. As a
- 1037 consequence, these refinements would not result in new significant impacts or greater
- 1038 intensity of impacts to paleontological resources than identified in the Final EIR/EIS. It
- 1039 should be noted that these tower refinements would occur in an area with low sensitivity
- 1040 for paleontological resources.

# 1041 2.6 Substation Clarifications

- 1042 2.6.1 Approved Project Element Substation Expansion and Upgrades
- 1043 Valley Substation Upgrades. As described in the Draft EIR/EIS for the DPV2 transmission
- 1044 line project, upgrades to the Valley Substation would disturb 16 acres of the substation, and
- 1045 would include a 500 kV SVC, a terminating tower (up to 180 feet high), fence and western
- 1046 property line relocation, and 2 acres for a temporary lay down area to support construction.
- 1047 The Final EIR/EIS did not address the Valley Substation upgrades.
- 1048 2.6.2 Substation Clarifications
- 1049 Valley Substation Upgrades. Upgrades to the Valley Substation, consistent with those
   1050 described in the Draft EIR/EIS, will be made as part of the project.
- 1051 2.6.3 Environmental Effects Substation Clarifications
- 1052 Valley Substation Upgrades. Because the Draft EIR/EIS includes the description of the
- 1053 Valley Substation Upgrades, the associated impacts were evaluated and discussed in the
- 1054 Draft EIR/EIS. Although the Final EIR/EIS did not address the Valley Substation Upgrades
- in the Project Description, the underlying environmental analysis should not be affected.Based on this, the clarification that the Valley Substation Upgrades are indeed part of the
- 1050 Based on this, the clarification that the valley substation Opgrades are indeed part of the 1057 Project does not result in new or more severe impacts than discussed in the CEQA/NEPA
- 1057 Froject does not result in new or more severe impacts than discussed in the CEQA/ NEP/ 1058 process
- 1058 process.

## 1059 2.6.4 Other Refinements

1060 Other project refinements may occur and would be coordinated with the CPUC at a future1061 time.

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# 1076 3.0 References

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# Figures

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1119 Insert Figure 1: Project Overview Map

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## 1134 Insert Figure 2: Construction Yard Overview Map

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1141 Insert Figures 3a – 3f: Construction Yards (Approved and Current)

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1148 Insert Figure 4: Helicopter Yards

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## 1154 Insert Figure 5: Colorado River Switchyard Layout

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## 1169 Insert Figure 6: Proposed Distribution and Telecom Refinements

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1184 Insert Figure 7: Cabazon Relocation (DV1)

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