

F. Cumulative Scenario and Impacts

F.1 Introduction and Methodology

A cumulative impact analysis is called for under both CEQA and NEPA. NEPA identifies three types of potential impacts: direct, indirect, and cumulative. “Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 CFR §1508.7. Under NEPA, both context and intensity are considered. Among other considerations when considering intensity is “[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.” 40 CFR §1508.27(b)(7).

Under CEQA Guidelines, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.” 14 Cal Code Regs §15130(a)(1). An EIR must discuss cumulative impacts if the incremental effect of a project, combined with the effects of other projects is “cumulatively considerable.” 14 Cal Code Regs §15130(a). Such incremental effects are to be “viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” 14 Cal Code Regs §15164(b)(1). Together, these projects comprise the cumulative scenario for the cumulative analysis.

Both the severity of impacts and the likelihood of their occurrence are to be reflected in the discussion, “but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion of cumulative impacts shall be guided by standards of practicality and reasonableness, and shall focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.” 14 Cal Code Regs §15130(b).

There are two different methodologies for identifying what would constitute the cumulative scenario. One is to use a “list of past, present, and probable future projects producing related or cumulative impacts.” 14 Cal Code Regs §15130(b)(1)(A). An alternate method of establishing the cumulative scenario for the analysis is to use a “summary of projects contain in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact.” 14 Cal Code Regs §15130(b)(1)(B).

The approach use in this EIR/EIS is the project list approach. In addition, analysts examined general plans and other documents, but did not rely on them to establish the cumulative scenario for the analysis.

The project list includes those projects found within a geographic area sufficiently large to provide a reasonable basis for evaluating cumulative impacts. The area over which the cumulative scenario is evaluated may vary by resource, because the nature and range of potential effects vary by resource. This area is identified as the geographic scope for the analysis of cumulative impacts related to a particular resource.

The analysis of cumulative effects must consider a number of variables. These include geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of the analysis is based on the nature of the geography surrounding the Proposed Project and the characteristics and properties of each resource and the region to which they apply. In addition, each project in a region will have its own implementation schedule, which may or may not coincide with the Proposed Project's schedule. This is a consideration for short-term impacts from the Proposed Project. However, to be conservative, the cumulative analysis assumes that all projects in the cumulative scenario are built and operating.

For purposes of analyzing cumulative impacts, the methodology described above is applied to both the Arizona and California portions of the Proposed Project.

F.2 Applicable Cumulative Projects and Projections

F.2.1 Specific Projects

Reasonably foreseeable projects that could contribute to the cumulative scenario are listed in Table F-1. The table indicates the project name and project type, as well as its location and status. Each project is identified by a map number, keyed to Figures F-1a through F-1d (see enclosed CD). These figures show the Proposed Project, and indicate projects contributing to the cumulative scenario. (No figure is provided for La Paz County, Arizona, because no anticipated or reasonably foreseeable projects have been identified along this segment of the Proposed Project that would contribute to a cumulative impact.)

Collectively, these projects represent known and anticipated activities that may occur in the project vicinity that have the potential to contribute to a cumulative impact. Because the DPV2 project would be linear with occasional nodal facilities along its length, the projects in Table F-1 do not interact with the DPV2 project along its entire route. Many projects in the cumulative scenario are limited in their geographic extent. Others are linear projects that would occur along some segments of the Proposed Project. Projects in the cumulative scenario become more or less relevant along the length of the Proposed Project, based on their changing proximity to the Proposed Project and, therefore, to the potential for cumulative interactions. As shown on Figures F-1a through F-1d (see enclosed CD), most of the projects in the cumulative scenario are located in developed or developing areas in Riverside and San Bernardino Counties, California.

Project number 4 in Table F-1 is the Desert Southwest Transmission Project (DSWTP). Additional explanation of this project is provided here because it is also considered as an alternative to the DPV2 project between Blythe and the Devers Substation. Also, as described in Section C.4.4.1 and Appendix 1 Section 4.4.1, this project has been independently proposed and an EIR/EIS has been completed. On September 15, 2006, the BLM issued a Record of Decision that approved the DSWTP. Given this approval, the DSWTP could be constructed immediately adjacent to the DPV2 ROW, which is the reason for the cumulative impact analysis presented here. Alternatively, if an agreement is reached between Desert Southwest Power and SCE, a single 500 kV line could be constructed in the SCE ROW and used by both parties.

An additional cumulative project, not specifically listed in Table F-1 but considered in all analyses in this document, is the existing Devers–Palo Verde No. 1 Transmission Line. As a “past project”, this transmission line parallels the proposed DPV2 line for over 180 miles, and would use its access roads for construction. The DPV1 line defines the location for the DPV2 line, and its presence defines the baseline for environmental analysis.

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
Harquahala to Kofa National Wildlife Refuge				
PALO VERDE HUB TO TS-5 500 KV TRANSMISSION PROJECT: Construction of a 500 kV transmission line, two switchyards, and related facilities, including the possible consolidation of a portion of the Bureau of Reclamation 230 kV line (AZ Public Service Company).	Industrial	Unincorporated Maricopa County: Originates at PVNG and terminates at the TS-5 Substation, approximately 20 miles northeast of PVNG.	Certificate of Environmental Compatibility granted June 15, 2005.	1
EOR9000 PROJECT: Upgrade transmission facilities along the northern portions of the Arizona border with Nevada, including the Navajo Crystal and Perkins-Mead 500 kV Series Capacitor Upgrades, thermal upgrades to the Westwing-Perkins 500 kV line, and upgrades to various 500 and 230 kV stations within Arizona (Salt River Project).	Industrial	Located north of I-10 in Arizona, greater than 40 miles north and northeast of Proposed Project.	Anticipated in-service date of June 2008 (12/07/05).	N/A
Kofa National Wildlife Refuge				
No projects identified				
Kofa National Wildlife Refuge to Colorado River				
No projects identified				
Palo Verde Valley (Colorado River to Midpoint Substation)				
BLYTHE II POWER PLANT PROJECT: Construction of a 520 MW combined-cycle power plant adjacent to the approved Blythe Energy Project (WAPA).	Industrial	Approximately 5 miles north of proposed route. Located north of I-10 and West Hobsonway.	Approved 10/21/05.	2
BLYTHE ENERGY PROJECT TRANSMISSION LINE MODIFICATIONS: Project would include upgrades to Buck Substation, the construction of a 67.4-mile 230 kV transmission line from Buck Substation to Julian Hinds Substation, the construction of the new Midpoint Substation (161 kV to 500 kV), and the construction of a 6.7-mile 230 kV transmission line from Buck Substation to Midpoint Substation (WAPA).	Industrial	Julian Hinds Substation located approximately 2.8 miles north of proposed route. Buck Substation located approximately 5 miles north of proposed route. Buck–Julian Hinds transmission line would parallel Proposed Project. Buck–Midpoint transmission line would intersect Proposed Project.	CEC, Western, and BLM finalizing Staff Assessment/Draft Environmental Assessment (10/27/05).	3
DESERT SOUTHWEST TRANSMISSION LINE PROJECT: Construction of 500 kV transmission line that would extend 118 miles from the new Keim Substation/switching station to Devers Substation (IID).	Industrial	Keim Substation would be located approximately 5 miles north of the proposed route. The Keim-Devers transmission line would generally parallel the Proposed Project.	Final EIS/EIR completed 10/17/05.	4

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
OG720 PAVEMENT PROJECT: Rehabilitation of existing pavement along I-10 (Caltrans District 8).	Transportation	Ranging from 1.1 to 4.4 miles north of proposed route. Located along I-10 from Milepost 133.7 to 144.2.	Construction to occur March through August 2008 (11/14/05).	5
Midpoint Substation to Cactus Center Rest Area				
DESERT SOUTHWEST TRANSMISSION LINE PROJECT: Construction of 500 kV transmission line that would extend 118 miles from the new Keim Substation/switching station to Devers Substation (IID).	Industrial	Keim Substation would be located approximately 5 miles north of the proposed route. The Keim-Devers transmission line would generally parallel the Proposed Project.	Final EIS/EIR completed 10/17/05.	4
OG720 PAVEMENT PROJECT: Rehabilitation of existing pavement along I-10 (Caltrans District 8).	Transportation	Ranging from 1.1 to 4.4 miles north of proposed route. Located along I-10 from Milepost 133.7 to 144.2.	Construction to occur March through August 2008 (11/14/05).	5
TENTATIVE PARCEL MAP NO. 29014: Development of six commercial lots on 6.5 acres (Riverside County).	Commercial	Approximately 0.5 miles north of proposed route in unincorporated Riverside County. Located south of I-10 and east of Wiley's Well Rd.	Requested 4th extension of time from Riverside County Planning Commission (05/25/05).	6
1A590 WILEY'S WELL REST AREA: Upgrades to Wiley's Well Safety Roadside Rest Area (Caltrans District 8).	Transportation	Approximately 1.1 miles north of proposed route. Located along I-10 from Milepost 134.0 to 138.0.	Construction to occur June 2009 through June 2010 (11/14/05).	7
OG700 PAVEMENT PROJECT: Rehabilitation of existing pavement along I-10 (Caltrans District 8).	Transportation	Ranging from 1.1 to 2.2 miles north of proposed route. Located along I-10 from Milepost 105.0 to 134.3.	Construction to occur February 2007 through October 2008 (11/14/05).	8
OC600 BRIDGE REHAB: Rehabilitation of bridge decks on 106 bridges (Caltrans District 8).	Transportation	Ranging from 0.6 miles north to 1.1 miles south of proposed route. Along I-10 from Milepost 62.0 to 115.2.	Construction to occur June 2008 through May 2009 (11/14/05).	9
PARADISE VALLEY: Construction of 8,950 mixed-use development on 5,400 acres (Riverside County).	Residential, Commercial	Traversed by the proposed route. Located in Shavers Valley, approximately 15 miles east of Coachella.	In proposal stage. Has not been approved by Riverside County Planning Commission.	10
OG850 CACTUS CITY REST AREA: Upgrades to Cactus City Safety Roadside Rest Area (Caltrans District 8).	Transportation	Less than 0.1 miles south of proposed route. Located along I-10 from Milepost 71.8 to 72.5.	Construction to occur April 2010 through April 2011 (11/14/05).	11

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
Cactus City Rest Area to Devers Substation				
DESERT SOUTHWEST TRANSMISSION LINE PROJECT: Construction of 500 kV transmission line that would extend 118 miles from the new Keim Substation/switching station to Devers Substation (IID).	Industrial	Keim Substation would be located approximately 5 miles north of the proposed route. The Keim-Devers transmission line would generally parallel the Proposed Project.	Final EIS/EIR completed 10/17/05.	4
0C600 BRIDGE REHAB: Rehabilitation of bridge decks on 106 bridges (Caltrans District 8).	Transportation	Ranging from 0.6 miles north to 1.1 miles south of proposed route. Along I-10 from Milepost 62.0 to 115.2.	Construction to occur June 2008 through May 2009 (11/14/05).	9
LOS ANGELES-IMPERIAL VALLEY TRANSMISSION LINE: Construction of approximately 90 to 130 miles of a new 500 kV transmission line and related facilities (LADWP).	Industrial	Ranging from approximately 0 to 3 miles north and south of proposed route. Located from the Imperial Valley to either the Victorville Substation of the new Upland Substation.	In process of preliminary route identification. Construction proposed to begin in 2009, with line in service in 2010 (11/02/05).	12
0G940 BRIDGE REHAB: Rehabilitation of bridge decks on 26 bridges (Caltrans District 8).	Transportation	Ranging from less than 0.1 miles to 1.7 miles south of proposed route. Located along I-10 from Milepost 16.2 to 60.4.	Construction to occur February through August 2011 (11/14/05).	13
TERRA LAGO EAST: Development of 851 dwelling units of various density types on 563 acres (City of Indio).	Residential	Approximately 0.7 miles south of proposed route in the City of Indio. Located north of Avenue 44, east of Golf Center Pkwy, and west of Dillon Rd. Adjacent to Landmark Lakes Golf Course.	Approved by the City of Indio (10/11/05).	14
ALFRESCO PROJECT: Proposal to subdivide 80 acres of vacant land into 275 single family lots with private streets and three recreational/retention basin common area lots (City of Indio).	Residential	Approximately 0.4 miles south of proposed route in the City of Indio. Located north of I-10 and the All American Canal, east of Monroe St. and west of Jackson St.	Approved by the City of Indio (10/11/05).	15
FIESTA DE VIDA: Construction of a 656-acre mixed use development (City of Indio).	Residential, Commercial	Approximately 0.8 miles south of proposed route in the City of Indio. Located north of Avenue 38 and east of Washington St.	Approved by the City of Indio (10/11/05).	16

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
DESERT SANDS UNIFIED SCHOOL DISTRICT HIGH SCHOOL SITE NO. 4: Development of a public high school on approximately 46.7 acres (Riverside County).	Educational Facilities	Approximately 1.8 miles south of proposed route in unincorporated Riverside County. Located north of I-10, south of 39th Avenue, and west of Jefferson St.	Approved by Riverside County Planning Commission (11/09/05).	17
TENTATIVE TRACT MAP NO. 30259: Construction of 26 single family residential lots on 15 acres (Riverside County).	Residential	Approximately 0.5 miles south of Proposed Project in unincorporated Riverside County. Located north of I-10, south of Ramon Rd., and west of Willis Palms Ln.	Riverside County Planning Commission denied extension of time for application (09/14/05).	18
SPECIFIC PLAN NO. 00343: Construction of 456-acre multi-phased development that would include 246-acre resort golf course, 970 residential units on 46 acres, 350-room golf resort hotel, and a 70-acre research and development park (Riverside County).	Residential, Commercial	Approximately 2.1 miles south of proposed route in unincorporated Riverside County. Located north of I-10 and Varner Rd., east of Cook St., and west of Washington St.	Scoping sessions being conducted by Riverside County Planning Commission (11/09/05).	19
TENTATIVE TRACT MAP NO. 29151, MINOR CHANGE NO. 1: Development of 105 single family residential lots on 36 acres (Riverside County).	Residential	Approximately 2.1 miles south of proposed route in unincorporated Riverside County. Located north of I-10, northeast of Varner Rd., south of Boca Chica Trail/White Sands, east of Bell Rd., and west of Jack Ivey Dr.	Approved extension of time for application to May 22, 2006 (10/12/05).	20
FAST TRACK PUBLIC USE PERMIT NO. 00876: Construction and operation of a community care facility as a residential emergency youth center for up to 20 children, ages two to 18, with accessory administrative offices, educational, recreation and storage totaling up to 17,000 sq.ft. of building area at a building height of approximately 20 ft. (Riverside County).	Public Facilities	Approximately one mile south of proposed route in unincorporated Riverside County. Located north of I-10 and East Lynn St., south of La Canada Way, and east of Thelma Ave.	Riverside County Planning Commission reviewing application (02/02/05).	21
TENTATIVE TRACT MAP NO. 28569: Construction of 133 single family residential lots on 30 acres (Riverside County)	Residential	Approximately 0.5 miles south of proposed route in unincorporated Riverside County. Located north of I-10 and El Centro Way and east of Robert Rd.	Approved extension of time for application to May 26, 2006 (08/31/05).	22

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
TENTATIVE TRACT MAP NO. 28570: Construction of 97 single family residential lots on 30 acres (Riverside County).	Residential	Approximately 0.5 miles south of proposed route in unincorporated Riverside County. Located north of I-10 and El Centro Way and west of Vista Way.	Approved extension of time for application to May 26, 2006 (08/31/05).	23
CONDITIONAL USE PERMIT NO. 3457: Construction of tire and auto parts warehouse and tire service within 22,000 sq.ft. building (Riverside County).	Industrial	Approximately 0.5 miles south of proposed route in unincorporated Riverside County. Located north of Ramon Rd., northeast of I-10, and southwest of Varner Rd.	Approved by Riverside County Planning Commission (08/31/05).	24
VARNER ROAD RECONSTRUCTION: Proposed construction work along Varner Rd. (City of Cathedral City).	Transportation	Approximately 0.2 miles south of proposed route in the City of Cathedral City. Improvements would occur along Varner Rd.	Unknown as of 10/05/05.	25
DATE PALM/VARNER FENCING: Construction of wind fencing along Date Palm Dr. and Varner Rd. (Caltrans District 8).	Transportation	City of Cathedral City: Less than 0.1 miles south of proposed route.	Unknown as of 10/05/05.	26
TENTATIVE PARCEL MAP 30726: Proposed construction of a 19-acre subdivision into 10 lots (City of Cathedral City).	Residential	Approximately 0.4 miles south of proposed route in the City of Cathedral City. Located north of I-10, west of Date Palm Dr., and south of Varner Rd.	Approved by City of Cathedral City (10/05/05).	27
DATE PALM REALIGNMENT: Study of realignment work along Date Palm Rd. (City of Cathedral City).	Transportation	Approximately 0.4 miles south of proposed route in the City of Cathedral City.	Unknown as of 10/05/05.	28
HEINRICH PROPERTY: General Plan amendment to re-configure designations for future master planned community (City of Cathedral City).	Residential	Approximately 0.4 miles south of proposed route. Located north of I-10 and east of Date Palm Dr. in the City of Cathedral City.	Pending (10/05/05).	29
DATE PALM INTERCHANGE: Proposed widening and improvement of existing interchange (City of Cathedral City).	Transportation	Approximately 0.8 miles south of proposed route in the City of Cathedral City. Improvements would occur to the Date Palm Interchange.	Unknown as of 10/05/05.	30

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
TRAVEL CENTER: Proposed travel center and retail development (City of Cathedral City).	Commercial	Approximately 0.7 miles south of proposed route in the City of Cathedral City. Located north of I-10 and west of Date Palm Dr.	Involved in preliminary discussions; application has not been filed (10/05/05).	31
<u>WHITEWATER RIVER BASIN THOUSAND PALMS FLOOD CONTROL PROJECT: Flood control project by the U.S. Army Corps of Engineers to provide regional flood control to a portion of Thousand Palms.</u>	<u>Industrial</u>	<u>The portion of DPV2 that lies north of Avenue 30 between Rio Del Sol and Via Las Palmas in Thousand Palms</u>	<u>In design phase (6/13/06)</u>	<u>N/A</u>
<u>HOUSING DEVELOPMENT: Proposed construction of 6 houses on 30 acres.</u>	<u>Residential</u>	<u>APN 651-030-004 in Thousand Palms. East of Mirage Substation and 1,000 feet south of transmission corridor</u>	<u>In planning/permitting (7/12/06)</u>	<u>N/A</u>
Devers Substation to East Border of Banning				
LOS ANGELES-IMPERIAL VALLEY TRANSMISSION LINE: Construction of approximately 90 to 130 miles of a new 500 kV transmission line and related facilities (LADWP).	Industrial	Ranging from approximately 0 to 3 miles north and south of proposed route. Located from the Imperial Valley to either the Victorville Substation of the new Upland Substation.	In process of preliminary route identification. Construction proposed to begin in 2009, with line in service in 2010 (11/02/05).	12
COMMERCIAL WECS PERMIT NO. 00071 REVISED PERMIT NO. 9 AND VARIANCE NO. 1771: Construction and operation of additional 60 wind turbines (total 219 WECS), and a variance to reduce safety setbacks from 330 ft. to 0 ft. and reduce wind access setbacks from 855 ft. to 0 ft. (Riverside County)	Industrial	Less than 0.1 miles south of proposed route in unincorporated Riverside County. Located north of I-10 and west of Whitewater Canyon Rd.	Recommended approval by Riverside County Planning Department (09/14/05).	32
1A990 BARRIER PROJECT: Construction of a concrete barrier and Thrie beam guardrail in the median of I-10 (Caltrans District 8).	Transportation	Ranging from less than 0.1 to 1.7 miles south proposed route. Located along I-10 from Milepost 6.9 to 24.2.	Construction to occur February 2007 through October 2008 (11/14/05).	33
Banning and Beaumont				
LOS ANGELES-IMPERIAL VALLEY TRANSMISSION LINE: Construction of approximately 90 to 130 miles of a new 500 kV transmission line and related facilities (LADWP).	Industrial	Ranging from approximately 0 to 3 miles north and south of proposed route. Located from the Imperial Valley to either the Victorville Substation of the new Upland Substation.	In process of preliminary route identification. Construction proposed to begin in 2009, with line in service in 2010 (11/02/05).	12

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
1A990 BARRIER PROJECT: Construction of a concrete barrier and Thrie beam guardrail in the median of I-10 (Caltrans District 8).	Transportation	Ranging from less than 0.1 to 1.7 miles south proposed route. Located along I-10 from Milepost 6.9 to 24.2.	Construction to occur February 2007 through October 2008 (11/14/05).	33
0F950 TRUCK FACILITY: Reconstruction of 860,000 sq.ft. truck inspection facility (Caltrans District 8).	Transportation	Approximately 0.5 miles south of proposed route. Located along west-bound I-10 from Milepost 15.8 to 15.9.	Construction to occur October 2005 through September 2006 (11/14/05).	34
OAK VALLEY SYSTEM PROJECT: Construction of the new Oak Valley Substation, four new 115 kV power lines, three new 12 kV distribution circuits, replacement of existing 115 kV poles and wires with upgraded facilities, and the relocation of an existing 220 kV transmission line (SCE).	Industrial	Ranging from 0 miles to approximately 2 miles south of proposed route. Banning Substation is located south of I-10 and east of San Gorgonio Ave. Oak Valley Substation would be located approximately 1.7 miles east of Highland Springs Rd.	Currently in planning and design phase. SCE has not filed application to CPUC (12/07/05).	35
BLACK BENCH SPECIFIC PLAN: Construction of 1,488 plan area would include 1,500 single-family residential units on 492 acres, 13-acre elementary school site, seven-acre public neighborhood park, 62-acre linear nature park, and 869-acre open space area (City of Banning).	Residential, Educational Facilities, Public Facilities, Recreation	Approximately 0.5 miles north of proposed route. Located north of Highland Home Rd., east of Highland Springs Ave., and west of Bluff St.	EIR currently being conducted on project (10/25/05).	36
SUNDANCE: Construction of 905-acre residential development and 15-acre commercial/industrial development on 1,162 acres (City of Beaumont).	Residential, Commercial/Industrial	Traversed by the proposed route. Located north of 8th St. and west of Highland Springs Ave.	Project under development (10/18/05).	37
TRACT NO. 28839-41, PACIFIC TRAILS: Construction of 20-acre residential development (City of Beaumont).	Residential	North and adjacent to proposed route. Located north of 14th St. and south of Cougar Way.	Final map has been approved and homes are under construction (10/18/05).	38
TRACT NO. 32020, RUNNING SPRINGS: Construction of 16-acre residential development (City of Beaumont).	Residential	Approximately 0.2 miles north of proposed route. Located in the southwest and southeast corners of Cougar Way and Palm Ave.	Tentative tract and building plans approved (10/18/05).	39
COUGAR RANCH II: Construction of 40-acre residential development (City of Beaumont).	Residential	Approximately 2.5 miles north of proposed route. Located north of Cougar Way at Palm Ave.	In process of grading final phase (10/18/05).	40

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
TRACT NO. 29839, SUNNY HILLS: Construction of 15-acre residential development (City of Beaumont).	Residential	Less than 0.1 miles north of proposed route. Located east of Beaumont Ave. and south of Cougar Way.	Final map has been filed and homes are under construction (10/18/05).	41
NOBLE CREEK: Construction of 232-acre residential development on 332 acres (City of Beaumont).	Residential	Traversed by the proposed route. Located north of 14th St. and west of Beaumont Ave.	Specific plan approved. Annexation for tract pending (10/18/05).	42
CHERRY VALLEY ACRES: Construction of 75-acre residential development (City of Beaumont).	Residential	Approximately 0.7 miles north of proposed route. Located north of Brookside Ave. and east of Nancy Ave.	Tract map and annexation filed (10/18/05).	43
SOLERA AT OAK VALLEY GREENS: Construction of 447-acre residential development and 12-acre commercial/industrial development on 533 acres (City of Beaumont).	Residential, Commercial/Industrial	Traversed by the proposed route. Located east of I-10 and north of Oak Valley Pkwy.	Currently in building phase (10/18/05).	44
TRACT NO. 30779, STETSON: Construction of 76-acre residential development (City of Beaumont).	Residential	Traversed by the proposed route. Located north of I-10 and south of Brookside Ave.	Final map has been recorded. Homes under construction (10/18/05).	45
SUNNY-CAL SPECIFIC PLAN: Specific Plan would allow 216-acre residential development and 10-acre commercial/industrial development (City of Beaumont).	Residential, Commercial/Industrial	Approximately 0.2 miles north of proposed route. Located north of Brookside Ave. and I-10.	Specific Plan/Annexation filed. Pending public hearing (10/18/05).	46
TENTATIVE TRACT MAP NO. 32528: Development of 25 acres into 24 single family residential lots (Riverside County).	Residential	Approximately 1.3 miles north of proposed route in unincorporated Riverside County. Located north of I-10 and Vineland St., south of Orchard St., east of Nance Ave., and west of Mountain View Ave.	Recommended approval by Riverside County Planning Department (07/06/05).	47
TRACT NO. 30748 & 31288, TOURNAMENT HILLS 1 & 2: Construction of 240-acre residential development on 263 acres (City of Beaumont).	Residential	Approximately 0.5 miles south of proposed route. Located southwest of Desert Lawn Dr. and Champions Dr and north of San Timoteo Canyon Rd.	Tournament Hills 1 under construction (10/18/05). Amendment to Oak Valley Specific Plan and EIR Addendum approved 10/19/04.	48
TRACT NO. 30891: Construction of 69-acre residential development on 73 acres (City of Beaumont).	Residential	Approximately 0.7 miles south of proposed route. Located north of San Timoteo Canyon Rd. and south of I-10.	Final map has been filed and grading is underway. Currently in building plan check (10/18/05).	49

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
OAK VALLEY COMMERCIAL: Construction of 15-acre commercial development (City of Beaumont).	Commercial	Approximately 0.4 miles south of proposed route. Located north of Oak Valley Pkwy and east of I-10.	Plot Plan filed and approved by Planning Commission (10/18/05).	50
THE SHOPS AT NOBLE CREEK: Construction of 38-acre commercial development (City of Beaumont).	Commercial	Approximately 0.5 miles south of proposed route. Located south of Oak Valley Pkwy and east of I-10.	Plot plan filed. Pending public hearing (10/18/05).	51
KIRKWOOD RANCH: Construction of 128-acre residential development (City of Beaumont).	Residential	Approximately 0.5 miles south of proposed route. Located north of I-10 and south of Oak Valley Pkwy.	Specific Plan and tentative tract map approved (10/18/05).	52
1A600 LANDSCAPING/IRRIGATION PROJECT: Installation of landscaping and an irrigation system (Caltrans District 8).	Transportation	Ranging from 1.0 to 1.3 miles south of proposed route. Located along I-10 from Milepost 6.3 to 7.0.	Construction to occur November 2007 through May 2011 (11/14/05).	53
PASEO BEAUMONT: Construction of 19-acre commercial/industrial development (City of Beaumont).	Commercial/Industrial	Approximately 1.6 miles south of proposed route. Located south of SR 60 and west of Highland Springs Ave.	Plot Plan filed and pending public hearing (10/18/05).	54
47230 ROADWAY IMPROVEMENTS: Improvements to I-10 that include pavement rehabilitation, widening of bridges, and construction of a median concrete barrier (Caltrans District 8).	Transportation	Ranging from 1.7 miles south to 2.8 miles north of the proposed route, and is traversed by route. Located along I-10 from Milepost 0.0 to 8.2.	Construction to occur July 2007 through June 2009 (11/14/05).	55
SENECA SPRINGS: Construction of 225-acre residential development and 14-acre commercial/industrial development on 295 acres (City of Beaumont).	Residential, Commercial/Industrial	Approximately 2.3 miles south of proposed route. Located south of I-10 and west of Highland Springs Ave.	Final map recorded and grading is underway (10/18/05)	56
FOUR SEASONS: Construction of 424-acre residential development and 9-acre commercial/industrial development on 571 acres (City of Beaumont).	Residential, Commercial/Industrial	Approximately 2.4 miles south of proposed route. Located south of I-10 and west of Highland Springs Ave.	Specific Plan approved. Homes currently under construction (10/18/05).	57
POTRERO CREEK ESTATES: Construction of 308-acre residential development on 737 acres (City of Beaumont).	Residential	Approximately 3.3 miles south of proposed route. Located south of I-10 and west of Highland Springs Ave.	Specific Plan approved (10/18/05).	58

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
TRACT NO. 32850: Construction of 29-acre residential development (City of Beaumont).	Residential	Approximately 2.5 miles south of proposed route. Located east of Manzanita Park Rd. and north of First St.	Tract approved; annexation pending on tract (10/18/05).	59
TRACT NO. 31426: Construction of 31-acre residential development (City of Beaumont).	Residential	Approximately 2.3 miles south of proposed route. Located east of Manzanita Park Rd. and north of First St.	Tract approved; annexation pending on tract (10/18/05).	60
MORAN RACEWAY INDUSTRIAL: Construction of 26-acre industrial development (City of Beaumont).	Industrial	Approximately 1.7 miles south of proposed route. Located on the northwest corner of Fourth St. and Nicholas Rd.	Plot Plan approved (10/18/05).	61
TRACT NO. 31162: Construction of 130-acre residential development (City of Beaumont).	Residential	Approximately 1.9 miles south of the proposed route. Located south of Fourth St. and west of Viele Ave. outside of Beaumont City limits.	Tentative tract map and EIR pending public hearing (10/18/05).	62
HIGHLAND CROSSING: Construction of 159-acre residential development on 187 acres (City of Beaumont).	Residential	Approximately 2.8 miles south of proposed route. Located south of Laird Rd. and east of SR 79.	Specific Plan and EIR pending public hearing.	63
ROLLING HILLS RANCH INDUSTRIAL: Construction of 155-acre industrial development (City of Beaumont).	Industrial	Approximately 1.5 miles south of proposed route. Located south of SR 60 and west of Viele Ave.	Specific Plan and Plot Plan approved (10/18/05).	64
THE PRESERVE: Construction of 730-acre residential development and 100-acre commercial/industrial development on 1,600 acres (City of Beaumont).	Residential, Commercial/Industrial	Approximately 1.6 miles south of proposed route. Located south of SR 60 and northwest of SR 79.	Specific Plan filed; annexation pending General Plan update (10/18/05).	65
HIDDEN CANYON: Construction of 160-acre residential development on 197 acres (City of Beaumont).	Residential	Approximately 1.9 miles south of proposed route. Located on southeast corner of SR 60 and Jack Rabbit Trail.	Specific Plan and EIR filed; annexation pending General Plan update (10/18/05).	66
JACK RABBIT TRAIL: Construction of 402-acre residential development and 5-acre commercial/industrial development on 542 acres (City of Beaumont).	Residential, Commercial/Industrial	Approximately 1.9 miles south of proposed route. Located south of SR 60 and west of Jack Rabbit Trail.	Specific Plan and annexation pending General Plan update (10/18/05).	67

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
HEARTLAND PROJECT: Construction of 208-acre residential development and 62-acre commercial/industrial development on 417 acres (City of Beaumont).	Residential, Commercial/Industrial	Approximately 1.2 miles south of proposed route. Located north of SR 60 and west of Potrero Blvd.	Specific Plan approved (10/18/05).	68
Banning Power Line Project: Construction of new 34.5 kV substation and 3.5-mile, 69 kV transmission line (Banning Electric Department).	Industrial	Ranging from 1 to 2 miles south of proposed route.	Beginning initial stages of CEQA review of project (12/07/05).	69
Calimesa and San Timoteo Canyon				
LOS ANGELES-IMPERIAL VALLEY TRANSMISSION LINE: Construction of approximately 90 to 130 miles of a new 500 kV transmission line and related facilities (LADWP).	Industrial	Ranging from approximately 0 to 3 miles north and south of proposed route. Located from the Imperial Valley to either the Victorville Substation of the new Upland Substation.	In process of preliminary route identification. Construction proposed to begin in 2009, with line in service in 2010 (11/02/05).	12
OAK VALLEY SYSTEM PROJECT: Construction of the new Oak Valley Substation, four new 115 kV power lines, three new 12 kV distribution circuits, replacement of existing 115 kV poles and wires with upgraded facilities, and the relocation of an existing 220 kV transmission line (SCE).	Industrial	Ranging from 0 miles to approximately 2 miles south of proposed route. Banning Substation is located south of I-10 and east of San Geronio Ave. Oak Valley Substation would be located approximately 1.7 miles east of Highland Springs Rd.	Currently in planning and design phase. SCE has not filed application to CPUC (12/07/05).	35
47230 ROADWAY IMPROVEMENTS: Improvements to I-10 that include pavement rehabilitation, widening of bridges, and construction of a median concrete barrier (Caltrans District 8).	Transportation	Ranging from 1.7 miles south to 2.8 miles north of the proposed route, and is traversed by route. Located along I-10 from Milepost 0.0 to 8.2.	Construction to occur July 2007 through June 2009 (11/14/05).	55
DPR 05-004 PROJECT: Installation of a colloactable antenna designed as a tree (City of Calimesa).	Industrial	Approximately 0.2 miles south of proposed route in the City of Calimesa. Located at 11251 Desert Lawn Dr. in the southwest corner of the Desert Lawn Memorial Park.	Approved by City of Calimesa (09/22/05).	70
TPM 31922 PROJECT: Creation of 6 conservation parcels and 4 parcels proposed for development (City of Calimesa).	Recreation, Residential	Traversed by the proposed route. Located west of I-10, south of County Line Rd., east of San Timoteo Canyon Rd., and north of Champions Dr. in the City of Calimesa.	Approved by City of Calimesa (09/22/05).	71

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
TRACT NO. 31462, SCPGA: Construction of 678-acre residential development and 46-acre commercial/industrial development (City of Beaumont).	Residential, Commercial/Industrial	Approximately 0.4 miles south of proposed route. Located north of San Timoteo Canyon Rd. and southwest of I-10.	Specific Plan approved by City of Beaumont. Tentative map has been filed and approved. Homes under construction (10/18/05).	72
SPA/AZ/GPA OAK VALLEY CORE/SUNCAL DEVELOPMENT AGREEMENT: Creation of Summerwind Ranch, consisting of 3,683 residential units (City of Calimesa).	Residential	Approximately 0.4 miles north of proposed route in the City of Calimesa. Located west of I-10, north of Cherry Valley Blvd. and south of Sandalwood Dr.	City of Calimesa waiting for revised agreement (09/22/05)	73
TPM 34053 PROJECT: Development of 236.64 acres for the commercial core of the Oak Valley Ranch (City of Calimesa).	Commercial	Approximately 0.4 miles north of proposed route in the City of Calimesa. Located west of I-10, north of Cherry Valley Blvd. and south of Sandalwood Dr.	Undergoing staff review (09/22/05).	74
CUP 05-002 PROJECT: Construction of Oak Valley Family Church 7,500 sq.ft. expansion and 11,000 sq.ft. new building (City of Calimesa).	Public Facility	Approximately 1 mile north of proposed route in the City of Calimesa. Located at 9580 Calimesa Blvd.	City of Calimesa waiting for revised project plan (09/22/05).	75
TTM 31450 SUNSET RANCH: Construction of 160 residential units on 52+ acres (City of Calimesa).	Residential	Approximately 1.1 miles north of proposed route in the City of Calimesa. Located on Calimesa Blvd.	City of Calimesa waiting for revised project plan (09/22/05).	76
TTM 26811 COUNTRY CLUB RIDGE PROJECT: Construction of 2664 residential units on 135 acres (City of Calimesa).	Residential	Approximately 1.4 miles north of proposed route in the City of Calimesa. Located on Singleton Rd.	Final map approved by City of Calimesa (09/22/05).	77
TTM 26925-BRASWELL: Construction of 97 residential units, with 50% restricted to Seniors on 41 acres. Includes 3 parcels for Wildlife Corridor and open space (City of Calimesa).	Residential, Recreation	Approximately 1.6 miles north of proposed route in the City of Calimesa. Located south of Canyon View Dr. and east of Buena Mesa and Mesa Grande Dr.	Grading Plan approved (09/22/05).	78
TTM 30387 JP RANCH PROJECT: Construction of 478 single family residential units on 239 acres (City of Calimesa).	Residential	Approximately 2.0 miles north of proposed route in the City of Calimesa. Located east of Calimesa Country Club and south of the terminus of Bryant, Douglas, and Fremont St.	Final map approved by City of Calimesa (09/22/05).	79

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
DPR 05-006 PROJECT: Construction of Senior Model Homes and Recreation Center (City of Calimesa).	Residential	Approximately 2.3 miles north of proposed route in the City of Calimesa. Located south of Bryant Street terminus and east of Calimesa Country Club.	Undergoing staff review (09/22/05).	80
TTM 33396/VARIANCE 05-002 PROJECT: Construction of 39 residential units (City of Calimesa).	Residential	Approximately 2.2 miles north of proposed route in the City of Calimesa. Located west of 5th St. and south of Avenue L.	City of Calimesa waiting for revised project plan (09/22/05).	81
DPR 05-005 PROJECT: Construction of two multi-tenant concrete tilt-up industrial buildings to accommodate 33 2,000 sq.ft. tenant spaces (City of Calimesa).	Industrial	Approximately 2.2 miles north of proposed route in the City of Calimesa. Located west of 5th St. and south of Avenue L.	City of Calimesa waiting for revised project plan (09/22/05).	82
SPA04-02/ZC/GPA-TTM 33931 FIESTA OAK VALLEY PROJECT: Construction of 3,450 residential units (City of Calimesa).	Residential	Approximately 1.7 miles north of proposed route in the City of Calimesa. Located west of I-10, north of Sandalwood Dr. and south of County Line Rd.	Undergoing staff review (09/22/05).	83
VACATION NO. AB 04008: Vacation of Smiley Boulevard to allow only the residence of the adjacent area to use it (Riverside County).	Transportation	Approximately one mile south of proposed route in unincorporated Riverside County. Located north and east of Reche Canyon Rd. and west of San Timoteo Canyon Rd.	Approved by Riverside County Planning Commission (07/20/05).	84
San Bernardino Junction to Vista Substation				
LOS ANGELES-IMPERIAL VALLEY TRANSMISSION LINE: Construction of approximately 90 to 130 miles of a new 500 kV transmission line and related facilities (LADWP).	Industrial	Ranging from approximately 0 to 3 miles north and south of proposed route. Located from the Imperial Valley to either the Victorville Substation of the new Upland Substation.	In process of preliminary route identification. Construction proposed to begin in 2009, with line in service in 2010 (11/02/05).	12
SOUTH HILLS OPEN SPACE PLAN: Construction of 500 residential units on 1,000-acre golf course community, designation of 600 acres of open space (City of Loma Linda).	Residential, Recreation	Traversed by the proposed route. Located in the South Hills of the City of Loma Linda.	In proposal stage. Has not been approved by City of Loma Linda.	85

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
BLUE MOUNTAINS SENIOR VILLAS: Construction of 120 affordable senior housing units, 6,500 sq.ft. community senior center, and 4-acre public park (City of Grand Terrace).	Residential, Recreation	Less than 0.1 miles south of proposed route in the City of Grand Terrace. Located at 22627 Grand Terrace Rd.	Specific Plan has been approved. Project is in final engineering phase (10/18/05).	86
GREENBRIAR TENTATIVE TRACT: Construction of 35 single family residences on lots ranging from 2,676 sq.ft. to 4,341 sq.ft. on a 3.66-acre site (City of Grand Terrace).	Residential	Approximately 0.25 miles south of proposed route in the City of Grand Terrace. Located at 11830 Mount Vernon Ave.	Specific Plan has been submitted to entitlement. Planning Commission has not yet scheduled review (10/18/05).	87
GRAND CANAL TOWNHOMES: Construction of 42 attached townhomes on a 3.5-acre site (City of Grand Terrace).	Residential	Approximately 0.4 miles south of Vista Substation in the City of Grand Terrace. Located at 11993 & 11981 Canal St.	Project approved by City Council, and is in final engineering phase (10/18/05).	88
San Bernardino Junction to San Bernardino Substation				
TRIMARK PACIFIC HOMES: Construction of 36 single family residential units on approximately nine acres (City of Loma Linda).	Residential	Approximately 0.25 miles east of proposed route. Located on southeast corner of George St. and Bryn Mawr Ave.	Approved and under construction (12/14/05).	89
RICHMOND AMERICAN HOMES: Construction of 51 single family residential units (City of Loma Linda).	Residential	Less than 0.1 miles east of proposed route. Located west of Bryn Mawr Post Office and Newport Ave.	Approved and 95 percent completed (12/14/05).	90
K.B. HOME: Construction of 227 single family residences on approximately 37 acres (City of Loma Linda).	Residential	Less than 0.1 miles east of proposed route. Located south of Mission Rd. between California St. and Van Leuven St.	Approved and under construction (12/14/05).	91
RYLAND HOMES: Construction of 196 single family residential units (City of Loma Linda).	Residential	Less than 0.1 miles east of proposed route. Located south of Mission Rd.	Approved and 90 percent completed (12/14/05).	92
UNIVERSITY VILLAGE S.P./ORCHARD PARK S.P.: Construction of approximately 2,200 residential units of attached and detached, for sale and for rent single family, multi-family, senior housing, and approximately 400,000 to 500,000 sq.ft. of commercial retail, office, and service uses on 308 acres of land. Project includes 25-acre elementary/middle school and parks, trails, and open space.	Residential, Commercial, Recreation, Educational Facilities	Less than 0.1 miles east of proposed route. Located south of Redlands Blvd, west of California St., and north of Mission Rd.	Approved and waiting for tract map submittal (12/16/05).	93

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
AMERICAN PACIFIC HOMES: Construction of 70 single family residential units on approximately 15 acres.	Residential	Less than 0.1 miles west of proposed route. Located at the southeast corner of Mission Rd. and Pepper St.	Approved and 90 percent completed (12/14/05).	94
CRA 779 PROJECT: Construction of five 271,093-sq.ft. industrial/warehouse buildings on 45.7 acres (City of Redlands).	Industrial	Less than 0.1 miles east of proposed route in the City of Redlands. Located on Research Dr., south of Almond Ave. and north of Lugonia Ave.	Undergoing project review by the City of Redlands (09/20/05).	95
CRA 781 PROJECT: Construction of 683,406-sq.ft. industrial/warehouse building on 31.4 acres (City of Redlands).	Industrial	Approximately 0.2 miles southwest of San Bernardino Substation in the City of Redlands. Located at 2501 San Bernardino Ave.	Under construction. 90% complete (09/20/05).	96
CRA 870 PROJECT: Construction of 417,821 sq.ft. industrial/warehouse building on 20.84 acres (City of Redlands).	Industrial	Approximately 0.2 miles east of proposed route in the City of Redlands. Located east of Marigold St. and south of San Bernardino Ave.	Application pending (09/20/05).	97
CRA 801 PROJECT: Construction of 1,313,470 sq.ft. industrial/warehouse building 60.32 acres (City of Redlands).	Industrial	Approximately 0.4 miles east of San Bernardino Substation in the City of Redlands. Located on California St., south of Palmetto Ave. and north of San Bernardino Ave.	Undergoing project review by the City of Redlands (09/20/05).	98
TRAMMELL CROW COMPANY PROJECT: Establish four industrial buildings (ranging from 54,000 sq.ft. to 784,000 sq.ft.) on 73.7 acres (San Bernardino County).	Industrial	Approximately 0.6 miles east-northeast of San Bernardino Substation in unincorporated San Bernardino County. Bounded by California St., Nevada St., Palmetto Ave., and Olive Ave.	Application accepted by San Bernardino County Planning Dept. (08/05/05). Must satisfy environmental requirements before decision will be made by Dept.	99
DAVIS PARTNERS, LLC PROJECT: Establish maximum 400,000 sq.ft. industrial building for a warehouse distribution facility, including maximum a 5,800 sq.ft. office on 17.86 acres (San Bernardino County).	Industrial	Approximately 1.0 mile east of San Bernardino Substation in unincorporated San Bernardino County. Located on northeast corner of Pioneer Ave. and Nevada St.	Application accepted by San Bernardino County Planning Dept. (06/03/05). Must satisfy environmental requirements before decision will be made by Dept.	100

Table F-1. DPV2 Cumulative Project List

Project	Type	Location	Status	Map No.
ABT-HASKELL DEVELOPMENT: Construct a maximum 70,000 sq.ft. industrial building complex for a fully enclosed composting facility with a maximum 4,500 sq.ft. office and 2,000 sq.ft. green house on 19.6 acres (San Bernardino County).	Industrial	Approximately 1.1 miles east-northeast of San Bernardino Substation in unincorporated San Bernardino County. Located east of Nevada St., approximately 660 ft. north of Palmetto Ave.	Application accepted by San Bernardino County Planning Dept. (09/30/05). Must satisfy environmental requirements before decision will be made by Dept.	101
CRA 793 PROJECT: Construction of 485,000 sq.ft. industrial/warehouse building on 22.86 acres (City of Redlands).	Industrial	Approximately 0.3 miles north-northeast of San Bernardino Substation in the City of Redlands. Located on 2200 Palmetto Ave.	Undergoing project review by the City of Redlands (09/20/05).	102
CRA 792 PROJECT: Construction of 259,572 sq.ft. industrial/warehouse building on 16.44 acres (City of Redlands).	Industrial	Approximately 0.3 miles north-northeast of San Bernardino Substation in the City of Redlands. Located on 2250 Palmetto Ave.	Undergoing project review by the City of Redlands (09/20/05).	103
ABT-HASKELL DEVELOPMENT: Construct a maximum 70,000 sq.ft. industrial building complex for a fully enclosed composting facility with a maximum 4,500 sq.ft. office and 2,000 sq.ft. green house on 19.6 acres (San Bernardino County).	Industrial	Approximately 1.1 miles east-northeast of San Bernardino Substation in unincorporated San Bernardino County. Located east of Nevada St., approximately 660 ft. north of Palmetto Ave.	Application accepted by San Bernardino County Planning Dept. (09/30/05). Must satisfy environmental requirements before decision will be made by Dept.	104
Other				
BOUSE TAP–GILA 161 KV STRUCTURE REPLACEMENT PROJECT: (WAPA)				NA
HEADGATE ROCK–BLYTHE STRUCTURE REPLACEMENT PROJECT: Replacement of H-frame wood poles and five specialized structures with H-frame, light-duty steel structures from Headgate Rock Substation to Blythe Substation (WAPA).	Industrial		Environmental Assessment Determination issued November 2003 (12/01/05).	NA
PARKER-GILA 161 KV TL QUARTZSITE REROUTE PROJECT: Proposed re-route of existing Parker-Gila 161 kv transmission line around Quartzsite (WAPA).	Industrial		Public scoping meeting held 12/16/03 in Quartzsite (04/15/05).	NA

F.2.2 Plans and Projections

The cumulative analysis relies on the list approach. However, a number of plans and projections, such as those found in General Plans and other planning and environmental documents, were examined. These provide insight into longer-term expectations regarding development. These are informative to the cumulative analysis even though specific projects are not necessarily identified. Table F-2 lists these documents.

Table F-2. Plans and Environmental Documents Consulted in Cumulative Analysis

ARIZONA
Federal Plans
Final Resource Management Plan/Environmental Impact Statement for the Lower Gila South Resource Management Plan/Environmental Impact Statement Area (BLM)
Final Amendment and Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan (BLM)
Kofa National Wildlife Refuge & Wilderness and New Water Mountains Wilderness Interagency Management Plan and EA (USFWS)
Yuma District Resource Management Plan (BLM)
Yuma Proving Ground Final Range Wide Environmental Impact Statement (U.S. Army)
State Plan
Arizona Department of Water Quality, Nonpoint Source State Management Plan Five Year Plan 2003-2008
Local Plans
La Paz County Comprehensive Plan
Maricopa County 2020, Eye To The Future Comprehensive Plan
Maricopa County 2020, Eye To The Future Tonopah/Arlington Area Plan
CALIFORNIA
Federal Plans
Record of Decision for the California Desert Conservation Area Plan Amendment for the Coachella Valley
California Desert Conservation Area Plan (BLM)
Proposed Northern and Eastern Colorado Desert Coordinated Management Plan, an amendment to the California Desert Conservation Area Plan 1980 and Sikes Act Plan with the California Department of Fish and Game, and Final Environmental Impact Statement (BLM)
Joshua Tree National Park Final General Management Plan Amendment Environmental Impact Statement, Backcountry and Wilderness Management Plan
Joshua Tree National Park General Management Plan, Development Concept Plans, Environmental Impact Statement
Santa Rosa and San Jacinto Mountains National Monument Final Management Plan and Record of Decision
Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan and Final Environmental Impact Statement
State Plans
Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, Public Draft
California Recreational Trails Plan
Local Plans
City of Banning Draft General Plan
City of Beaumont General Plan (1993) and Draft General Plan (2005)

Table F-2. Plans and Environmental Documents Consulted in Cumulative Analysis

City of Blythe General Plan
City of Calimesa General Plan
City of Cathedral City Comprehensive General Plan
City of Coachella General Plan
City of Desert Hot Springs Comprehensive General Plan
City of Grand Terrace General Plan
City of Indio General Plan 2020
City of Loma Linda Draft General Plan (2004)
City of Loma Linda General Plan Update, Final PEIR
City of Loma Linda Draft PEIR
City of Palm Springs General Plan
City of Redlands 1995 General Plan
Colorado River Basin Regional Water Quality Control Board, Water Quality Control Plan Colorado River Basin Region 7
Riverside County Comprehensive General Plan
San Bernardino County General Plan
Santa Ana Regional Water Quality Control Board (8) Watershed Management Initiative
Southern California Association of Governments Regional Comprehensive Plan and Guide
Western Riverside County Multiple Species Habitat Conservation Plan

F.3 Cumulative Impact Analysis of Proposed Project

This section presents an analysis of the potential for the DPV2 project to contribute to significant cumulative effects when it is considered in conjunction with relevant projects listed in Table F-1. The cumulative impact analysis is undertaken on a resource-by-resource basis and is presented in the same order as the project-specific analyses in Section D.

F.3.1 Biological Resources

Geographic Scope

The geographic scope for the analysis of cumulative impacts related to biological resources in the Arizona portion of the Proposed Project is five miles wide, centered on the Proposed Project. The area begins at the Harquahala Generating Station Switchyard in western Maricopa County and ends at the Colorado River (Arizona-California border) in La Paz County. However, there are no projects in La Paz County that could contribute to a cumulative scenario. The geographic scope for the cumulative analysis in Maricopa County is appropriate because it captures the area within which the proposed Palo Verde Hub to TS-5 500 kV Transmission Project would parallel the Proposed Project to the east. This is the only future project, other than the existing DPV1 transmission line, in the cumulative scenario for this area that would have to potential to contribute to cumulative impacts.

In the California portion of the Proposed Project, the geographic scope for the analysis of cumulative impacts to biological resources includes the following portions of Riverside and San Bernardino Counties:

- Palo Verde Valley
- Chuckwalla Valley between the Chuckwalla and McCoy Mountains and between the Orocopia Mountains/Mecca Hills and Eagle Mountains/Cottonwood Mountains
- Coachella Valley between the Little San Bernardino Mountains and the Salton Sea
- the area between San Jacinto Valley and the San Bernardino Mountains from San Gorgonio Pass to Moreno Valley
- the area in the San Bernardino Valley south of Cajon Pass, west of the San Bernardino Mountains, and east of the Chino Hills.

This geographic scope is appropriate because the topographic barriers and elevation changes associated with mountain ranges limits the distribution of habitats and the associated plant and wildlife species that occur in those habitats. From Blythe to the Banning/Cabazon area, the route of the Proposed Project primarily traverses desert habitats where plant and wildlife species have relatively specific habitat requirements. These requirements generally restrict their distribution and make it less likely that they would also occur in the mountainous areas surrounding the valleys. In the areas from Banning/Cabazon west to San Bernardino, the topography and available habitats are more varied, so the geographic extent is expanded to include a broader area that also includes the upper portion of the Santa Ana River watershed. This broader area includes the foothills of the San Bernardino Mountains that lie north and east of the Proposed Project between San Bernardino and Banning/Cabazon and the San Jacinto Mountains and Box Springs Mountains located south of the route in this same area. The western portion of the identified geographic extent includes the valley area west of the terminus at Vista Substation.

The projects related to biological resources include nearly all of those found in Table F-1, [and the existing DPV1 transmission line](#).

Significance Criteria

With regard to biological resources, the contribution of cumulative impacts from the Proposed Project would be considered significant if within the geographic scope of the impact analysis the Proposed Project:

- contributes considerably to existing or identified substantial adverse effects on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFG, AGFD, BLM, USFWS, or USFS
- contributes considerably to existing or identified adverse effects on any species listed or proposed for listing as endangered or threatened, or on critical habitat for these species directly or through habitat modification
- contributes considerably to existing or identified substantial adverse effects on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG, AGFD, BLM, USFWS, or USFS
- contributes considerably to existing or identified substantial adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act
- contributes considerably to existing or identified interference with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites

- contributes considerably to existing or identified conflicts with local policies or ordinances protecting biological resources within the cumulative area of impact (example: tree or cactus preservation policy or ordinances)
- contributes considerably to conflicts with the provisions of a National Wildlife Refuge (Kofa) Plan or an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or State HCP or combined HCP/NCCP.

Analysis

In the Arizona portion of the Proposed Project, after applying the significance criteria to the projects in the cumulative scenario, no significant cumulative impacts are found with regard to biology. Though it is difficult to judge the cumulative effects of DPV1 and DPV2 together on bighorn sheep or other animal movements without further study, cumulative impacts to biological resources could occur. During construction of DPV1, transmission line construction activities precluded normal ram crossing between the New Water Mountains and the Kofa Mountains/Livingston Hills, however, subsequent operation of the line did not appear to affect the sheep crossing of the corridor.¹ Mitigation measures implemented as part of the Proposed Project are designed to reduce any impacts to biological resources and wildlife movement to less than significant levels and it is assumed that the operational impacts of the line both individually and cumulatively would be less than significant as well, similar to the findings by Smith et al. (1986). Therefore, the cumulative scenario does not contribute considerably to any existing or identified impacts on habitats, species, protected wetlands, species migration or migration corridors, or use of wildlife nursery sites.

Likewise, there are no considerable contributions to existing or identified conflicts with policies and ordinances protecting biological resources, or to provisions of any relevant habitat conservation plans or natural communities conservation plans.

Maricopa County is growing extremely quickly and residential development is resulting in the loss of native habitat, as evidenced by the following text from the County's website:

Approximately 625 square miles of the County's 9,226 square miles have been developed for residential or commercial use as of 1995. Approximately 236,000 acres will likely be developed over the next 30 years and there is about 1.7 million acres of potentially developable land in the County².

The anticipated development of 236,000 acres in Maricopa County over the next 30 years is a rate of nearly 8,000 acres per year. As described in Table B-2 (Section B.2.1), a total of approximately 106 acres would be permanently disturbed as a result of construction of the entire 230 mile Devers-Harquahala 500 kV portion of the project. This small area of disturbance results from the fact that the access road for the existing DPV1 line will serve DPV2. Approximately 26 miles (11 percent) of the route would be located in Maricopa County (where development is occurring at the fastest pace), so the permanent habitat loss in the County would be about 12 acres. This is not considered to be a considerable contribution to the loss of natural habitat in Maricopa County.

¹ Smith, E.L., Gaud, W.S., Miller, G.D., and M.H. Cochran. 1986. Studies of desert bighorn sheep (*Ovis canadensis mexicana*) in western Arizona: Impacts of the Palo Verde to Devers 500 kV Transmission Line. Final Report-Volume II. E. Linwood Smith and Associates, Tucson, AZ. Submitted to Southern California Edison Co. and Arizona Public Service Co. 51pp.

² <http://www.fcd.maricopa.gov/Flooding/Growth.asp>

One project, the Palo Verde Hub to TS-5 500 kV Transmission Project, roughly parallels the eastern portion of the Proposed Project in Maricopa County for approximately 6 miles. The parallel segments of both projects would be constructed in Creosote–White Bursage habitat. Both projects would traverse Sonoran Desert tortoise habitat for small portions of their alignments. Impacts to the tortoise would be temporary during construction phases and maintenance of the transmission lines, but they would not be expected to result in a substantial adverse effect on the tortoise. Other cumulative impacts would include loss of cacti as a result of grading activities and disturbances to migratory birds and other sensitive wildlife during construction. These impacts would be minor and limited to the construction phases of the projects. Cumulative impacts of the Proposed Project and Palo Verde Hub to TS-5 500 kV Transmission Project would be less than significant.

With population in-migration and growth in the region comes the need for residential, commercial, educational, and recreational development, with concomitant industrial, utility, and transportation support. All of these result in construction activities that have the potential to adversely affect biological resources. However, any projected growth within the geographic scope of the project would be in the future, well after the construction of the Proposed Project.

In the California portion of the Proposed Project, road improvements and communications towers that would be constructed in primarily urbanized areas were determined to have little or no impact on biological resources because of lack of suitable habitat and the close proximity of developed areas. The remaining projects in the cumulative scenario consist primarily of residential, industrial, and energy projects that would result in impacts to land that supports biological resources. Cumulative impacts for these projects were assessed based on (1) the proximity of the projects to each other either geographically or temporally; (2) the probability of actions affecting the same environmental system, especially systems that are susceptible to development pressures; (3) the likelihood that the project will lead to a wide range of effects or to a number of associated projects; (4) whether the effects of other projects are similar to those of the project under review; and (5) the likelihood that the project will occur.

Based on the results of historic urbanization, cumulative scenario projects would result in native vegetation removal, alteration of hydrology, increased erosion/sedimentation, and spread of noxious and invasive plant species into previously native areas. Without mitigation, the Proposed Project would result in significant impacts to biological resources, including a permanent and temporary loss of vegetation communities and wildlife habitat and introduction of noxious and non-native plant species. With the implementation of a combination of the APMs that are focused on avoidance of native vegetation, wildlife habitat, and riparian and wetlands areas, and weed control, and the implementation of mitigation measures that are designed to further avoid biological resources (with pre-construction surveys and biological monitoring, focused surveys, habitat restoration), the impacts of the Proposed Project will be reduced to a less than significant level. These measures are designed to minimize project effects and restore affected areas to pre-project conditions. Therefore, the Proposed Project would not considerably contribute to the already existing or identified substantial adverse effects on riparian habitat or other sensitive natural community.

The existing, proposed, and pending projects may result in impacts to listed species or the removal of habitat for these species. Nine proposed or pending projects within the area (Map Numbers 1 through 10) would be constructed in or adjacent to designated critical habitat for desert tortoise. Six proposed or pending projects (Map Numbers 18 through 23) would be constructed in or adjacent to designated critical habitat for Coachella Valley fringe-toed lizard and one Proposed Project, the Los Angeles–Imperial Valley Transmission Line, would occur in the vicinity of Whitewater Canyon, which is designated critical habitat for arroyo toad and proposed critical habitat for mountain yellow-legged

frog. Because the Proposed Project will span the Whitewater River downstream of these designated and proposed critical habitat units, it will not contribute to adverse effects to critical habitat. The Proposed Project would result in minimal disturbance to listed species and critical habitat for desert tortoise and Coachella Valley fringe-toed lizard. The Proposed Project will avoid impacts to other listed species, including least Bell's vireo, southwestern willow flycatcher, California gnatcatcher, San Bernardino kangaroo rat, Stephens' kangaroo rat, and a number of listed plant species through avoidance of habitat, focused surveys, and biological monitoring. With implementation of the APMs that are focused on avoidance of habitat for these species, biological monitoring, and restoration of habitat, as described in Section D.2.5.2 and Mitigation Measures B-1a, B-8a, B-9a, and B-9b that will further minimize project effects to listed plant and wildlife species (avoidance of Critical habitat, focused protocol surveys, pre-construction surveys, biological monitoring, habitat restoration, purchase of compensation lands), the Proposed Project would result in less than significant impacts to these species and critical habitat. Therefore, the Proposed Project would not considerably contribute to the already existing or identified adverse effects on any species listed as endangered or threatened, or proposed or critical habitat for these species within the cumulative area of impact.

The existing, proposed, and pending projects may result in impacts to candidate, sensitive, or special-status similar to those impacts to listed plant and wildlife species as described above. Implementation of APMs and mitigation measures as described above would result in less than significant impacts to these species. Therefore, the Proposed Project would not considerably contribute to the already existing or identified substantial adverse effects on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFG, AGFD, BLM, or USFWS within the cumulative area of impact.

The existing, proposed, and pending projects may result in impacts to jurisdictional waters and wetlands by increasing sedimentation, increasing potential for erosion, or altering their hydrology. Because the Proposed Project would span the majority of drainages, construction of the Proposed Project would result in minimal disturbance to jurisdictional waters and wetlands. This disturbance would result in less than significant impacts with implementation of APMs as described in Section D.2.5.2 and Mitigation Measures B-1a, B-10a, and B-10b designed to minimize project effects to these biological resources. Therefore, the Proposed Project would not considerably contribute to the already existing or identified substantial adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act within the cumulative area of impact.

The existing, proposed, and pending projects may interfere with the movement of native resident or migratory fish or wildlife species, or with native resident or migratory wildlife corridors, or with the use of native wildlife nursery sites through removal of habitat, alteration of hydrology, increased sedimentation/erosion, or construction of permanent obstacles that would prevent wildlife movement. The Proposed Project would not result in long-term impacts to migratory corridors or native fish nursery sites since the spanning of transmission lines over drainages and other natural corridors would allow for the continued movement of fish and wildlife species. Because the Proposed Project includes APMs focused at avoidance of riparian habitats and timing of construction so as to avoid impacts to during the breeding season of migratory birds, the Proposed Project is expected to have less than significant impacts as described in Section D.2.5.2. Therefore, the Proposed Project would not considerably contribute to the already existing or identified interference of the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites within the cumulative area of impact.

The existing, proposed, and pending projects may result in conflicts with local policies or ordinances protecting biological resources within the cumulative area of impact. The Proposed Project includes APMs that will minimize potential conflicts with local policies and ordinances, (such as avoidance of habitat for threatened and endangered species and avoidance of riparian or wetlands areas, In addition, implementation of mitigation measures would eliminate conflicts and therefore, the Proposed Project would not considerably contribute to the already existing or identified conflicts with local policies or ordinances protecting biological resources within the cumulative area of impact.

The existing, proposed, and pending projects may result in conflicts with the provisions of a National Wildlife Refuge (Kofa) or an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or State HCP within the cumulative area of impact. The Proposed Project would result in less than significant conflicts to a National Wildlife Refuge, HCP, or NCCP through implementation of APMs as described in Section D.2.5.2. Therefore, the Proposed Project would not considerably contribute to the already existing or identified conflicts with the provisions of a National Wildlife Refuge (Kofa) or an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or State HCP within the cumulative area of impact.

Projects

Several transmission projects are being constructed or proposed within the same utility corridor. The Blythe Energy Project Transmission Line Modifications, the Desert Southwest Transmission Line Project, and the Los Angeles–Imperial Valley Transmission Line Project would be located within portions of the existing DPV1 corridor, and the proposed DPV2 corridor. The approved Blythe II Power Plant Project will be constructed north of I-10 and west of the City of Blythe, approximately five miles north of the Proposed Project. The proposed Banning Power Line Project would be sited approximately one to two miles south of the Proposed Project and west of the Devers Substation in the City of Banning. The proposed Oak Valley System Project would include the construction of a new Oak Valley Substation and the construction and relocation of power lines that occur within 0 to 2 miles south of the Proposed Project. Pending approval, the Commercial WECS Permit and Variance would construct and operate 60 additional wind turbines in unincorporated Riverside County less than 0.1 miles south of the proposed route. Transmission and energy projects are required in order to meet the needs of proposed development projects in the area. The Proposed Project would remain primarily within an existing transmission line ROW and would result in minimal permanent impacts to biological resources. Temporarily impacted areas would be restored to pre-existing conditions through implementation of Mitigation Measures B-1a and B-3a and would result in less than significant impacts (Class II). Although the Proposed Project would accommodate the other transmission and energy projects that would in turn enable future growth and development in the region, the Proposed Project would not significantly contribute to cumulative effects of these regionally significant projects to biological resources.

Projections

The cumulative impacts on biological resources from the Proposed Project will not only result from specific projects that have been identified above, they may also result from the regional plans, general plans, management plans, and multiple species habitat conservation plans that include all or a portion of the geographic extents for biological resources. The plans that may contribute to the cumulative impacts include:

- **County General Plans.** San Bernardino County General Plan and Riverside County Integrated project 2002 General Plan
- **City General Plans.** Grand Terrace, Loma Linda, Redlands, Calimesa, Beaumont, Banning, Palm Springs, Coachella, Desert Hot Springs, Cathedral City, Indio, and Blythe
- **Area Plans.** The Pass Area Plan, Western Coachella Valley Area Plan, Eastern Coachella Valley Area Plan, Desert Center Area Plan, Palo Verde Valley Area Plan, California Recreational Trails Plan, California Desert Conservation Area Plan
- **Management Plans.** Proposed Northern and Eastern Colorado Desert Coordinated Management Plan, Joshua Tree National Park Final General Management Plan Amendment Environmental Impact Statement, Backcountry and Wilderness Management Plan, Joshua Tree National Park General Management Plan, Development Concept Plans, Environmental Impact Statement, Santa Rosa and San Jacinto Mountains National Monument Final Management Plan and Record of Decision, Santa Rosa and San Jacinto Mountains National Monument Proposed Management Plan and Final Environmental Impact Statement
- **Multiple Species Habitat Conservation Plans.** Western Riverside County Multiple Species Habitat Conservation Plan and Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan, Public Draft.

Given the rapid rate of growth in the area of impact, numerous development and public works projects have been proposed by local jurisdictions in eastern and western Riverside County and in southwestern San Bernardino County. The City General Plans, Area Plans, Management Plans, and Multiple Species Habitat Conservation Plans named above, have accounted for this projected growth by identifying and requiring the preservation of the most biologically significant resources within their plan area. The Proposed Project would result in less than significant conflicts with these plans through implementation of APMs as described in Section D.2.5.2 and proposed mitigation measures that would restore and preserve habitat in and adjacent to regionally significant biological resources that could otherwise be threatened by future development.

F.3.2 Visual Resources

Geographic Scope

Given the height of the Proposed Project structures, the geographic scope for the analysis of impacts on visual resources can extend up to two miles for similarly scaled structures and facilities and approximately 0.7 miles for development projects (residential, commercial and industrial) and transportation projects. This is based on the scale of a project and the diminution of the apparent size of objects at greater distances. In general, taller structures can be viewed from greater distances. Table F-1 provides a list of projects considered for the visual resources cumulative scenario.

Significance Criteria

A cumulative impact would occur if a viewer perceives that the general visual quality of an area is diminished by the proliferation of visible structures or construction effects, even if the changes are not within the same field of view as existing structures or facilities. The cumulative impact would be considerable if:

- the viewshed is altered significantly
- visual access to scenic resources is impaired significantly
- scenic character or visual quality is diminished significantly
- the project's visual contrast is increased significantly.

Analysis

To the extent that construction of the Proposed Project would be visible within the same field of view as one or more of the cumulative projects also under construction, adverse cumulative visual impacts could result. This would be due to the visible presence of construction equipment, vehicles, materials, and personnel. However, these visual impacts would be temporary. Based on the fact that these are short-duration impacts for each of the projects in the cumulative scenario and that not all of the cumulative scenario projects would be under construction simultaneously, the construction-period impacts would not create significant cumulative effects. No additional mitigation measures are recommended beyond Mitigation Measures V-1a (Reduce visibility of construction activities and equipment) and V-2b (Reduce visibility of land scarring in arid and semi-arid landscapes), identified in Section D.3.6.

Once constructed, commercial, residential, mixed-use, and industrial projects would be permanently visible. However, as projects are developed in the same field of view as the Proposed Project these projects would reduce or close lines of sight for observers. Each new project would create obstructions in the field of view, blocking with foreground, structures more distant middle ground and background structures. This would result in the Proposed Project being less visible from within developed areas. While fields of view and viewsheds would be reduced by development, the Proposed Project would not considerably contribute to this reduction.

Industrial projects with tall, highly visible vertical elements differ from ground-level projects in terms of their potential visibility and their visual character. One industrial project — the DPR 05-004 Telecommunications Antenna project (Map No. 70) — would be within the field of view of the Proposed Project and would have a vertical form. However, the antenna is proposed to be designed as a tree. Depending on the effectiveness of the design, it would not likely share the technological or structurally complex characteristics and industrial color of the Proposed Project and would not contribute to cumulative impacts.

There are six cumulative energy infrastructure projects that would share many of the same characteristics of the Proposed Project, and would be within the same field of view as the Proposed Project. These projects would exhibit similar vertical structural form, structural complexity, and industrial character as the Proposed Project. The projects include:

- Palo Verde Hub to TS-5 500 kV Transmission Project (Map No. 1)
- Blythe Energy Project Transmission Line Modifications (Map No. 3)
- Desert Southwest Transmission Line Project (Map No. 4)
- Los Angeles–Imperial Valley Transmission Line Project (Map No. 12)
- Commercial WECS Permit No. 0071 Revised Permit No. 9 – Wind Turbines (Map No. 32)
- Oak Valley System Project Transmission Lines Project (Map No. 35).

In each case, the Proposed Project and the cumulative projects combined would result in a perceived increase in industrialization of the landscape, diminution of visual quality, and increase in visual contrast. Also, in the cases where there appear to be multiple corridors due to greater separation between facilities, the projects would contribute to a sense of proliferation of energy infrastructure within the Interstate 10 corridor. Specific areas where this would occur include:

- Palo Verde Hub in the vicinity of Salome Highway and the Interstate 10 crossing
- Blythe Energy Project on Palo Verde Mesa and around Alligator Rock
- Desert Southwest Project also on Palo Verde Mesa and in the vicinity of Alligator Rock
- Los Angeles–Imperial Valley Project in the Coachella Valley, Whitewater Canyon, and San Geronio Pass.

The resulting cumulative visual impacts would be substantially greater than those that would occur with the Proposed Project alone and they would be significant. This would be the result of a significant change in the character and visual quality of the viewshed. Visual simulations were prepared for three of the cumulative projects to illustrate representative cumulative visual impacts.

Key Viewpoint CU-1 was established on eastbound Chuckwalla Valley Road in Chuckwalla Valley, approximately 0.7 miles southeast of the intersection with Corn Springs Road. Figure F-2A (see enclosed CD) presents the existing view of the Devers–Palo Verde 1 corridor as it spans the road. Figure F-2B (see enclosed CD) presents a visual simulation of the same corridor with the addition of the Blythe Energy Transmission Project 230 kV transmission line, the Desert Southwest Project 500 kV transmission line, and the proposed Devers–Palo Verde 2 (DPV2) 500 kV transmission line. The visual simulation presented in Figure F-2B (see enclosed CD) illustrates the substantial increase in industrial character, structure prominence, and view blockage that would occur in the vicinity of the DPV1 corridor with construction of the cumulative projects.

Key Viewpoint CU-2 was established on Cedar Hollow Road at about mid-block, which is located immediately south of Beaumont High School in the City of Beaumont. Figure F-3A (see enclosed CD) presents the existing view to the west-southwest of the DPV2 West of Devers transmission line corridor. Figure F-3B (see enclosed CD) presents a visual simulation of the same corridor with the addition of the Oak Valley System Project 115 kV transmission line along the northern edge of the corridor, immediately adjacent to the proposed DPV2 Project 230 kV transmission line replacement structures. A comparison of Figure F-3B (showing the cumulative Oak Valley Project) to Figure D.3-22B (in Section D.3, showing the proposed DPV2 Project only) on the enclosed CD illustrates the increase in industrial character, structure prominence, and view blockage that would occur with the cumulative project.

Within Kofa National Wildlife Refuge, the DPV2 line would result in a considerable cumulative visual impact when viewed in the context of the existing DPV1 line. The DPV1 line on its own contributes substantial view blockage or visual impairment, industrial character and visual contrast, which in turn diminish the visual quality of the Kofa landscape in the vicinity of the route. When placed adjacent to DPV1, the visual effects of the DPV2 line (increased visual contrast, structural prominence and, view blockage) would substantially exacerbate the existing adverse visual impacts of the existing DPV1 line, resulting in a considerable cumulative visual impact.

Although the cumulative impacts would not be reduced less than significant levels, Mitigation Measure V-3a is recommended to reduce the resulting adverse cumulative visual impacts that would occur. Measure V-3b (the pairing of structures) essentially would require the consolidation of the separate corridors to the extent possible. For example, the Palo Verde Hub Transmission Line alignment should be revised to parallel the DPV1/DPV2 Palo Verde Alternative alignment from Palo Verde Nuclear Generating Station until it reaches the north side of I-10 rather than creating a new corridor through the Palo Verde Hills and a new crossing of I-10 in relatively close proximity to the DPV1/DPV2 crossing. Also, the Blythe Energy Project Transmission Line and the Desert Southwest Transmission Line Project should parallel the DPV1 line in the vicinity of Alligator Rock. Further, the Los Angeles–Imperial Valley Transmission Line should parallel the DPV1/DPV2 alignment in the Coachella Valley and through San

Gorgonio Pass. With such mitigation the cumulative impacts would be reduced, but not to a less than significant level.

F.3.3 Land Use

Geographic Scope

The interactions among land uses are affected by the type and proximity of the land uses. For land use, the geographic scope for the analysis of cumulative impacts of land use is defined as the area within one mile of the transmission line route and associated facilities. Land uses immediately adjacent to the ROW can be affected by the project's implementation. Projects at a greater distance from the ROW would have lesser interaction with the project. Land uses one mile greater than one mile from the project are highly unlikely to be perceived as interacting with the project in a cumulative way.

The projects considered in evaluating cumulative land use impacts are shown on Figure F-1 (see enclosed CD) and described in Table F-1. In addition to the specific projects identified in Table F-1, relevant planning and environmental documents in Table F-2 were considered when identifying activities that could contribute to cumulative land use impacts.

Significance Criteria

With regard to land use, cumulative impacts resulting from the Proposed Project would be considered significant if:

- The incremental effect of the Proposed Project in combination with other projects would conflict with applicable land use plans, policies, or regulations adopted by an agency with jurisdiction over the project
- The incremental effect of the Proposed Project in combination with other projects would directly or indirectly disrupt an established or recently approved land use.
- The Proposed Project would directly or indirectly disrupt a planned future development.

Analysis

While construction of the Proposed Project was found to have an incremental contribution to existing cumulative effects on land uses, there would be no cumulative impact from operation of the Proposed Project. Table F-1 lists projects that were identified for the cumulative land use analysis.

Construction Impacts

Development is occurring rapidly in Riverside and San Bernardino Counties, within both the cities and the surrounding unincorporated communities. Much of this development is located in open space areas that are adjacent to existing residential and commercial development. Such development is beneficial to the growing populations within the cities and surrounding communities that require housing, and in particular are seeking a variety of housing opportunities (e.g., low to middle-income housing). New development also benefits existing businesses that target the surrounding communities as their customer base. As such, the existing cumulative conditions have created beneficial impacts for residential and business opportunities.

Sections D.4.6 and D.4.7 discuss the impacts from construction and operation of the Proposed Project on existing residential and commercial land uses. New residential and commercial/industrial developments have been proposed or are under construction within two miles of the project. Some of these new

development projects would be traversed by the Proposed Project (e.g., Paradise Valley, Noble Creek, and South Hills Open Space Plan). Construction of the Proposed Project would likely occur between the years 2007 to 2009 for the Devers-Harquahala 500 kV line segment, and between 2006 and 2009 for the West of Devers segment. No definitive construction schedule is currently available for the proposed residential and commercial/industrial projects listed in Table F-1. It is likely that construction of some of these projects would overlap with construction of the Proposed Project. The construction of multiple projects within the same area would create a significant cumulative construction impact to adjacent residential land uses. Commercial land uses may be cumulatively impacted if access to these businesses was precluded during construction activities. Given the existing cumulative land use impact that would occur from the construction of multiple projects, the construction of the Proposed Project would incrementally contribute to this cumulative effect. However, potentially significant cumulative impacts resulting from the construction of the Proposed Project in conjunction with other projects would be mitigated to a less than significant level through the implementation of the following mitigation measures that were introduced in Sections D.4.6 and D.4.7: Mitigation Measures L-1a (Prepare Construction Notification Plan), L-1d (Coordinate with affected business owners), and L-1e (Coordinate construction schedule with public and community facilities).

Operational Impacts

Operational impacts would occur to existing or proposed residential, commercial, or industrial land uses if the Proposed Project would permanently disrupt or preclude these land uses. As discussed in Sections D.4.6 and D.4.7, the Proposed Project would be located within or adjacent to an existing utility corridor. The majority of the projects identified in Table F-1 would be located west of Devers Substation, for which the Proposed Project would reduce the industrial intensity of the existing ROW. The Proposed Project would be located within or adjacent to a designated utility use, and as such, the project would not change the existing land use types along the corridor. New projects (e.g., Paradise Valley, Noble Creek, and South Hills Open Space Plan) that would be traversed by the Proposed Project must plan their development around the existing utility corridor. As the Proposed Project would be located within or adjacent to this corridor, the Proposed Project would not conflict or preclude future developments. The Proposed Project would not create an incremental contribution to any cumulative effect. No cumulative land use impacts would occur during operation of the Proposed Project.

General Plans

Many of the cities and counties along the Proposed Project route are experiencing a surge in population growth. As a consequence, rapid development is occurring within these jurisdictions in order to provide adequate housing and public services to meet the needs of growing communities. In order to assess the adequacy of existing resources and areas of future growth, local jurisdictions discuss the existing and future needs of the cities and counties in their general and comprehensive planning documents. The following plans were evaluated with regard to cumulative impacts as they relate to the Proposed Project

- **Maricopa County 2020 Comprehensive Plan.** The nearest General Plan Development Area to the Proposed Project is located south of and adjacent to the City of Buckeye. The Proposed Project would construct a new utility transmission line adjacent to an existing utility use, and would not traverse a General Plan Development Area or conflict with any General Plan Development Area.
- **La Paz County Comprehensive Plan.** Areas marked for future development are located adjacent to existing residential communities. The majority of La Paz County is currently undeveloped, and maintaining these open space areas is a primary objective of the county. The Proposed Project would

be located within or adjacent to an existing utility corridor and would not traverse any county growth area or conflict with existing open space.

- **Riverside County Integrated Project 2020 General Plan.** The Proposed Project would construct a new transmission line adjacent to an existing utility use, and would provide additional utility services for future development. As such, the project is consistent with the general plan.
- **San Bernardino County General Plan.** The Proposed Project would involve reconductoring and upgrades to one of the existing transmission lines within the county, and as such, would be consistent with the general plan.
- **City of Banning General Plan.** The Proposed Project would traverse the north planning area, but would remain within an existing designated utility corridor. The project would be consistent with the general plan.
- **City of Beaumont General Plan.** The Proposed Project would be constructed within or adjacent to an existing utility corridor and would bring additional electricity to southern California. As such, the project would be consistent with the general plan.
- **City of Calimesa General Plan.** The reconductoring and upgrades that have been proposed along this easement would provide additional electricity to southern California. As such, the project would be consistent with the general plan.
- **City of Loma Linda General Plan.** The project upgrades and reconductoring activities that would occur in the City of Loma Linda would be located within an existing utility corridor and would be consistent with the general plan.

F.3.4 Wilderness and Recreation

Geographic Scope

The geographic scope of the cumulative impact analysis for wilderness and recreation includes recreation areas located in the Maricopa and La Paz Counties in Arizona and Riverside and San Bernardino Counties in California. Wilderness and recreation resources in these areas are managed by the following jurisdictions:

- **Federal.** Bureau of Land Management, National Park Service, U.S. Forest Service, and U.S. Fish and Wildlife Service;
- **State.** California Department of Parks and Recreation and California Department of Fish and Game;
- **County.** Unincorporated Maricopa, La Paz, Riverside, and San Bernardino Counties;
- **City.** Grand Terrace, Colton, Loma Linda, Redlands, Calimesa, Beaumont, Banning, Palm Springs, Cathedral City, Coachella, in California. (There are no Arizona municipalities related to the geographic scope for this resource.)
- **Other.** Nature Conservancy.

In addition to the projects listed in Table F-1, plans and environmental documents listed in Table F-2 were considered when identifying development activities that could contribute to cumulative wilderness and recreation impacts.

Significance Criteria

With regard to wilderness and recreation, cumulative impacts resulting from the Proposed Project would be considered significant if the incremental effect of the Proposed Project in combination with other projects would :

- directly or indirectly disrupt activities of established federal, State, or local wilderness and/or recreation resources
- would substantially reduce the scenic, biological, cultural, geologic, or other important factors that contribute to the value of federal, State, local, or private wilderness areas or recreational facilities.
- directly or indirectly disrupt activities of planned future federal, State, or local wilderness areas and/or recreation resources.

Analysis

The construction and operation of the Proposed Project was found to have an incremental contribution to existing cumulative effects on recreational resources. Table F-1 lists projects that were identified for the cumulative wilderness and recreation.

Construction Impacts

Cumulative construction impacts to recreational resources would occur if more than one project would be constructed across or adjacent to a recreation or wilderness area at the same time. The following recreational resources may be cumulatively affected by the construction of projects noted:

- **Chuckwalla Valley Dune Thicket ACEC.** This ACEC would be traversed by the Proposed Project, the proposed Blythe Energy Project Transmission Line Modifications, and the proposed Desert Southwest Transmission Line Project.
- **Alligator Rock ACEC.** This ACEC would be traversed by the Proposed Project, the proposed Blythe Energy Project Transmission Line Modifications, and the proposed Desert Southwest Transmission Line Project.
- **Indio Hills Palms State Park.** The primary access roads to this State park would be traversed by the Proposed Project and the proposed Desert Southwest Transmission Line Project.
- **Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC.** This recreational resource would be traversed by the Proposed Project, the proposed Desert Southwest Transmission Line Project, and the Los Angeles–Imperial Valley Transmission Line. The Tentative Tract Map No. 30259 project has also been proposed adjacent to the ACEC boundary.
- **Laborde Canyon State Vehicular Recreation Area.** This proposed recreation area would be traversed by the Devers-Valley No. 2 Alternative.
- **San Timoteo State Park.** This proposed recreation area would be traversed by the Proposed Project.

Hiking and Riding Trail System and Hulda Crooks Park in the City of Loma Linda. Designated hiking and riding trails would be crossed by the Proposed Project, and would be entirely displaced by the South Hills Open Space Plan. Hulda Crooks Park is located adjacent to the proposed construction sites for these two projects.

As discussed in Sections D.5.6 and D.5.7, the construction effects of the Proposed Project on the recreational resources listed above would be significant, but mitigable. APMs L-3 and B-3, and Mitigation Measures L-1a (Prepare Construction Notification Plan), WR-1a (Coordinate construction schedule with the authorized officer for the recreation area), and WR-1c (Coordinate with local agencies to identify alternative recreation areas) have been recommended to minimize the Proposed Project's construction impacts on recreation and wilderness areas to a less than significant level. Two new recreation areas are currently being proposed by State agencies within the Proposed Project area (i.e., San Timoteo State Park and the Laborde Canyon State Vehicular Recreation Area). Although the Proposed Project would traverse these new recreation areas, no additional residential, commercial, or industrial projects have been proposed across or adjacent to these areas. As such, no cumulatively considerable impacts would occur to these proposed recreation areas.

For the five existing recreation areas listed above, the construction of multiple projects across these resources would create additional impacts. Construction of the Proposed Project would likely occur between the years 2007 and 2009 for the Devers-Harquahala 500 kV line segment, and between 2006 and 2009 for the West of Devers segment. No definitive construction and operation schedule is currently available for the projects listed in Table F-1. However, it is likely that construction of some of these projects would overlap with the construction of the Proposed Project. Each of the projects would likely have a significant construction impact to the recreational resources that it traverses. Without the implementation of mitigation measures, the construction impacts from projects on the recreation areas listed above would be significant and unavoidable. Assuming that the construction period for the Proposed Project would overlap with the identified projects, the incremental effect of the Proposed Project would result in additional significant construction impacts to recreational resources. The implementation of mitigation for the Proposed Project would do little to reduce its incremental contribution to a cumulative construction impact. As such, construction of the Proposed Project in conjunction with other Proposed Projects listed in Table F-1 would result in significant and unavoidable cumulative construction impacts to traversed recreation areas.

Operational Impacts

Cumulative operational impacts to recreational resources would occur if more than one project permanently precluded recreational resources or changed the recreational value of those resources. The Proposed Project may also create permanent impacts to proposed recreational facilities that would be located along the project route. A list of existing recreational resources that would be traversed by the Proposed Project in conjunction with other projects is included under Construction Impacts, above.

As discussed in Sections D.5.6 and D.5.7, the operational effects of the Proposed Project on the recreational resources listed above would result in significant, but mitigable impacts resulting from the preclusion of recreational activities. APM L-1 and Mitigation Measure WR-3a (Coordinate tower and road locations with the authorized officer for the recreation area) has been recommended to minimize preclusion impacts to a less than significant level. The Proposed Project would also create significant, unavoidable impacts to recreational resources located east of the Devers Substation (i.e., Chuckwalla Valley Dune Thicket ACEC and Alligator Rock ACEC), as it would permanently alter the character or change the recreational value of those resources. West of the Devers Substation, the Proposed Project components would result in less than significant impacts to the character or value of recreational resources.

No cumulatively considerable operational impacts would occur to the proposed San Timoteo State Park or the Laborde Canyon State Vehicular Recreation Area, as only the Proposed Project would traverse or be located adjacent to these areas. Project-specific impacts would occur during operation of the Pro-

posed Project across these new recreation areas; however, these impacts would not be cumulatively considerable. As discussed in Section D.5.7 for the recreation areas west of Devers Substation, preclusion of recreation areas that resulted from operation of the Proposed Project would create a significant but mitigable impact, and implementation of Mitigation Measure WR-3a (Coordinate tower and road locations with the authorized officer for the recreation area) would serve to reduce potential impacts to a less than significant level. In addition, the Proposed Project would not increase the total amount of industrial development in the existing ROW, resulting in less than significant impacts to the character or value of these recreation areas.

Cumulatively considerable impacts would occur to existing recreation areas across which multiple projects would be constructed and operated. For example, east of the Devers Substation, the Proposed Project would be constructed adjacent to the existing DPV1 transmission line. The DPV1 transmission line was constructed across or adjacent to recreation areas in La Paz and Maricopa Counties in Arizona, and Riverside County in California, including the Kofa NWR, Chuckwalla Valley Dune Thicket ACEC, Alligator Rock ACEC, and the Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC. Adding the Proposed Project to this existing corridor would intensify the industrial development that crosses these recreational resources. Any additional projects that may traverse these recreational areas (see Table F-1) would further increase the industrial development and further reduce the undeveloped, natural landscape of the recreational areas. As significant impacts have already occurred to the character and recreational value of the recreation areas located along the DPV1 line (BLM, 1979), operation of the Proposed Project, alone or in conjunction with other Proposed Projects, would contribute to a significant, cumulative effect to established recreation areas (Class I).

Recreation areas that are not currently traversed by the DPV1 transmission line include the Hulda Crooks Park and the riding and hiking trail system within the City of Loma Linda. As discussed in Section D.5.7, operation of the Proposed Project would not create impacts to these recreational resources. In contrast, the proposed South Hills Open Space Plan would be located in the open space areas of the City of Loma Linda that are the current site of the riding and hiking trail system. As such, construction of the South Hills Open Space Plan would permanently displace the established riding and hiking trails. However, the South Hills Open Space Plan has not yet been approved by the City of Loma Linda, and as such there is no existing cumulative effect to recreational resources in the City. As the Proposed Project would not create any operational impacts to the riding and hiking trail system or Hulda Crooks Park, there would be no incremental cumulative effect to these resources as a result of the Proposed Project.

F.3.5 Agriculture

Geographic Scope

The geographic scope for the analysis of cumulative impacts on agricultural resources is a zone five miles on either side of the Proposed Project. In urban fringe areas throughout the West, agricultural land is being converted to other land uses. In most cases this conversion is identified as part of county or local General Plans. The 10-mile wide geographic scope is necessarily arbitrary, as farmland conversion is a region wide phenomenon. However, it is representative of the relationship between the Proposed Project's incremental contribution to farmland conversion and the cumulative impact of all projects. Cumulative impact analysis for agricultural resources has been conducted using the projects in Table F-1.

Significance Criteria

Significant cumulative impacts to agricultural resources would occur if the incremental effect of the Proposed Project in combination with other projects would:

- convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation and to the Natural Resources Conservation Service, to non-agricultural use (Loss of 10 ac of Prime Farmland and/or 40 ac of Farmland are considered significant.)
- interfere with agricultural operations
- conflict with a Williamson Act contract (California).

Analysis

The construction and operation of the Proposed Project would make an incremental contribution to existing and anticipated cumulative effects on agricultural resources. Impacts to agricultural resources would occur where project structures would occupy agricultural land that includes Farmland (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland), Williamson Act lands, or agricultural operations. Table F-1 lists projects included in the cumulative agriculture analysis because they have the potential to adversely affect agricultural resources.

Projects identified as making up the cumulative scenario would disturb more than 11,500 acres³ within 5 miles of the Proposed Project. The final plans, including the types and locations of structures and construction processes, for most of these projects remain unknown at this time. Therefore, their specific relationship with farmland, Williamson Act lands, and general agricultural operations can not be determined. However, due to the number and location of these projects, they would convert some farmland to non-agricultural use and interfere with agricultural operations in Maricopa County, Arizona, and Riverside and San Bernardino Counties, California, and potentially conflict with a Williamson Act contract in Riverside County.

- Cumulative construction impacts affecting agriculture would occur if more than one project would be constructed across or within farmland, agricultural operations, and/or Williamson Act lands. The following five areas could be cumulatively affected by the construction and operation of the Proposed Project and other projects.
- **Harquahala Valley/Harquahala Plain (Maricopa County, AZ).** This area of Prime and Unique Farmland and agricultural operations would be crossed by the Proposed Project and the proposed Palo Verde Hub to TS-500 kV Transmission Project.
- **Palo Verde Valley (Riverside County, CA).** This area includes Farmland, agricultural operations, and Williamson Act lands. It would be crossed by the Proposed Project, the Blythe II Power Plant Project (Map No. 2), and the proposed Blythe Energy Project Transmission Line Modifications (Map No. 3), and the proposed Desert Southwest Transmission Line Project (Map No. 4).
- **Coachella Valley (Riverside County, CA).** This area consists of Farmland, including Prime Farmland and Unique Farmland, and possible agricultural operations that are crossed by the Proposed Project northeast of the City of Palm Desert. However additional Farmland, including Prime Farmland, and possible agricultural operations are located nearby in the Cities of Indio and Coachella that

³ This figure (greater than 11,500 acres) was calculated by adding the total amount of acres that would be developed for projects as presented in Table F-1.

would potentially be traversed by Desert Southwest Transmission Line Project (Map No. 4), Los Angeles–Imperial Valley Transmission Line (Map No. 12), Terra Lago East (Map No. 14), Alfresco Project (Map No. 15), Fiesta de Vida (Map No. 16), Desert Sands Unified School District High School Site No. 4 (Map No. 17), Specific Plan No. 00343 (Map No. 19), and Tentative Tract Map No. 29151 Change No. 1 (Map No. 20).

- **Banning/Beaumont/Calimesa (Riverside County, CA).** This area includes Farmland, including Prime and Unique Farmland, and possible agricultural operations that are crossed by the Proposed Project. The following projects could traverse this farmland: Los Angeles–Imperial Valley Transmission Line (Map No. 12), Oak Valley System Project (Map No. 35), Rolling Hills Ranch Industrial (Map No. 63), The Preserve (Map No. 65), Jack Rabbit Trail (Map No. 67), Tract No. 31462, SCPGA (Map No. 72), SPA/AZ/GPA Oak Valley Core/Suncal Development Agreement (Map No. 73), TPM 34053 Project (Map No. 74). These projects, as well as other projects listed in Table F-1 with Map Nos. 37 through 83 could traverse agricultural operations within and in the vicinity of the Cities of Banning, Beaumont, and Calimesa.
- **Vicinity of San Bernardino Substation (San Bernardino County, CA).** This area includes Farmland, including Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, and agricultural operations that would be crossed by the Proposed Project. This area could also be traversed by the Blue Mountains Senior Villas (Map No. 85), Richmond American Homes (Map No. 90), K.B. Home (Map No. 91), Ryland Homes (Map No. 92), CRA 801 Project (Map No. 98), Trammell Crow Company Project (Map No. 99), Davis Partners, LLC Project (Map No. 100), Abt-Haskell Development (Map Nos. 101 and 104), CRA 793 Project (Map No. 102), and CRA 792 Project (Map No. 103).

The development footprint and temporary disturbances of some of the projects, particularly the electric utility facilities, are unknown at this time. However, based on available information, these five areas alone could have 4,000 acres of new development. Because of their location in or proximate to agricultural areas, some portion of that 4,000 acres will be on agricultural land. Given the significance criteria establishing a significant impact at 10 acres of Prime Farmland or 40 acres of Farmland, it is expected that this develop would create a significant impact that cannot be mitigated. In addition, the impacts caused by construction of these linear projects would interfere to an unknown degree with existing agricultural operations that they cross. The interference could include damaging crops or soil, impeding access to certain fields, obstructing farm vehicles, or disrupting drainage and irrigation systems. Therefore the cumulative impact of the construction of the Proposed Project and these projects would be significant.

The Proposed Project would temporarily disturb approximately 890 acres during construction. About 60 acres of this temporarily disturbed area would be Farmland, and approximately two-thirds of this Farmland would be Prime Farmland. As discussed in Sections D.6.2 and D.6.3, construction impacts of the Proposed Project on the agricultural resources within the Palo Verde Valley would be potentially significant, and with the other areas construction impacts would be less than significant. Implementation of APMs L-4 and L-5, and Mitigation Measures AG-1a (Establish agreement and coordinate construction activities with agricultural landowners) and L-1a (Prepare Construction Notification Plan) within the Harquahala Valley/Harquahala Plain and the Palo Verde Valley would reduce the potentially significant impacts to a less than significant level. with implementation of the APMs and Mitigation Measures, impacts to farmlands from construction of the projects would be continue to be significant, but the Proposed Project's incremental effect would be smaller than without mitigation. Given that the cumulative impact is significant, any incremental contribution from the Proposed Project would also be considered cumulatively considerable.

F.3.6 Cultural and Paleontological Resources

Geographic Scope

The geographic scope for the analysis of cumulative impacts on cultural and paleontological resources is a five-mile wide corridor centered on the Proposed Project. This is conservative because most impacts to cultural and paleontological resources occur on the site of the resource itself through physical disturbance or encroachment. The proximity of these resources to the Proposed Project would be of interest only to the extent that proximity would considerably affect the context or integrity of the resource.

Table F-1 provides a list of projects within the five-mile-wide corridor, including the Proposed Project, that have been considered in the cultural and paleontological cumulative scenario.

Significance Criteria

Cumulative impacts resulting from the Proposed Project would be considered significant if the Proposed Project would:

- cause an adverse effect or substantial adverse change in the characteristics of a historic property or Traditional Cultural Property as defined by federal guidelines
- cause a substantial adverse change in the characteristics of a significant cultural resource or unique archaeological site, as defined under State of California guidelines
- cause a substantial adverse change in the characteristics of a cultural resource included in a local register of historical resources
- uncover, expose, and/or damage Native American human remains
- cause a substantial adverse change in the characteristics of a significant paleontologic resource.

Analysis

As described in Table F-1, there are approximately 85 projects in the planning or construction phases within a five-mile-wide corridor surrounding the Proposed Project that have the potential to adversely affect cultural and paleontological resources.

In Arizona, the Palo Verde Hub to TS-5 500 kV Transmission Project roughly parallels the eastern portion of the Proposed Project in Arizona for approximately 6 miles. This part of that project is within the geographic scope of the cumulative analysis. However, no cultural resource sites are known to exist within the geographic scope for cumulative analysis.

Unknown, unrecorded cultural or paleontological resources may be found at nearly any development site. As they are discovered, sites are recorded and information retrieved. If the nature of the resource requires it, the resource is protected. When discovered, cultural and paleontological resources are treated in accordance with applicable federal and State laws and regulations as well as the mitigation measures and permit requirements applicable to a project. It is not known what cultural resources, if any, would be affected by development of the Palo Verde Hub project. Should resources be discovered they would be subject to legal requirements designed to protect them, therefore no cumulative impact to cultural or paleontology resources would occur in this geographic area of the Proposed Project.

Similarly, in Riverside and San Bernardino Counties the actual number and type of resources that might be adversely affected by the cumulative scenario projects is unknowable without a comprehensive inventory of the area within the geographic scope of the cumulative analysis. Development of such an inventory is beyond the reasonable scope of this analysis. Typically, cultural and paleontological resources are identified as part of the permitting process for individual undertakings, and often are discovered only during ground disturbing activities. Applicable laws and regulations afford specific protections to discovered resources.

As discussed in Section D.7.6, the Proposed Project has the potential to cause adverse effects to cultural and paleontological resources. The National Historic Preservation Act and implementing regulations require that the lead agency for all undertakings on federal or tribal land, or that receive federal funding or require a federal permit, take into account the effects of their actions on significant cultural resources. In California, CEQA requires similar evaluation and mitigation of project impacts on significant resources to reduce those impacts to a level that is less than significant.

Implementation of Applicant Proposed Measures and mitigation measures would serve to reduce the cumulative effects on cultural and paleontological resources to a less than significant level. Given that the same laws and regulations apply to all development in the geographic area where cumulative projects are found, the cumulative impacts on cultural and paleontological resources from ongoing and Proposed Projects would be less than significant.

F.3.7 Noise

Geographic Scope

For Proposed Project, noise would be limited principally to the construction period. For construction noises, the geographic scope of potential cumulative impacts is the area within one-quarter mile of the Proposed Project. The Proposed Project would affect ambient noise levels in the immediate proximity of project construction activities and the operational transmission facilities. The extent of project noise impacts would generally be localized. At distances greater than one-quarter mile, steady construction noise from the Proposed Project would fade into quiet backgrounds. The baseline for assessing cumulative noise impacts project includes the noise sources associated with other projects in the immediate vicinity of the Proposed Project (Table F-1) and the existing and future sensitive receptors near project-related activities or noise sources.

Significance Criteria

Cumulative noise impacts would be considered significant if the incremental effect of the Proposed Project in combination with other projects would

- conflict with applicable noise restrictions or standards imposed by regulatory agencies
- result in a substantial permanent increase in ambient noise levels (more than five dBA) above levels existing without the project at sensitive receptor locations
- result in a substantial temporary or periodic increase in ambient noise levels above levels existing without the project at sensitive receptor locations.

Analysis

Construction of the Proposed Project would cause noise impacts perceived at a greater distance than would permanent operation of the facilities, which would have more localized noise impacts. However, construction noise is not permanent. Because it is not known if construction of cumulative projects would occur concurrently with construction of nearby portions of the Proposed Project, many of the projects listed in Table F-1 are not likely to contribute to noise impacts in the cumulative scenario. However, there is the possibility that a variety of projects would occur at the same time as project construction. Some would occur within one-quarter mile of project-related construction activities. In the areas where project construction may occur simultaneously with other development, the combined effects of noise generated by the project and other development would impact sensitive receptors cumulatively.

Cumulative projects include residential developments that could bring new residences near the project corridor. The level of impact at each new receptor would be similar to that identified in this analysis for baseline receptors, and mitigation measures applicable to the Proposed Project would limit the impact of the project.

A mitigation measure identified for the Proposed Project is MM N-1a: Implement best management practices for construction noise. This mitigation measure would limit the noise impacts of the project, and the limited likelihood of project noise impacts occurring simultaneously with other construction would ensure that project construction noise is not cumulatively considerable.

F.3.8 Transportation and Traffic

Geographic Scope

After construction, the Proposed Project would have little transportation or traffic associated with it for routine inspection and maintenance. Therefore, the only opportunity for cumulatively significant impacts to occur with other projects would be during construction of the Proposed Project, making them time as well as geographic dependent. Taking this into account, the geographic scope for the analysis of cumulative impacts on Transportation and Traffic is defined as being up to one-half mile from the Proposed Project for an active construction site. Table F-1 identifies projects to be considered when construction activities are concurrent with those of the Proposed Project. Because it is not known if construction of the cumulative projects would occur concurrently, some of the projects listed in Table F-1 may not contribute to the cumulative scenario.

Significance Criteria

Cumulative impacts resulting from the Proposed Project would be considered significant if, when combined with other projects, construction of the Proposed Project would:

- increase traffic congestion noticeably due to a temporary reduction in the number or width of travel lanes
- restrict access to or from adjacent land uses with no suitable alternative access
- restrict the movement of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units) with no reasonable alternative routes available

- create an unacceptable reduction in level of service on the roadways in the project vicinity, as defined by the affected jurisdiction, due to increased construction-related vehicle trips associated with the Proposed Project
- disrupt bus or rail transit service with no suitable alternative routes or stops
- result in a temporary disruption of rail traffic
- impede pedestrian movements or bike trails with no suitable alternative routes.
- increase the demand for or reduce the supply of parking spaces with no provisions for accommodating the resulting parking deficiencies
- conflict with planned transportation projects in the project area
- create noticeable deterioration of roadway surface as a result of heavy truck or construction equipment movements associated with the Proposed Project.

Analysis

Except for routine maintenance and inspection, there would be little traffic associated with the Proposed Project once it was constructed. Labor and material movements during construction are a very small part of existing traffic on public roads. During construction, crews would be working at various points along the project. Any traffic that would result due to the construction of the Proposed Project would be dispersed along the ROW and would be short-term at any one location along the route. Any work in or over a public road ROW would require an encroachment permit that would specify how and when the encroachment would occur. The only interaction between the Proposed Project and roads with regard to traffic stoppage or restrictions would be during the stringing of new conductors. It is assumed that permits would specify times for the execution of the work that would have the least impact on traffic. Requirements for any road or lane closures would be coordinated with local authorities and, where appropriate, the State agency responsible for highways. Any road closures would be required on a short-term basis. Crossing of any rail lines would be coordinated with the owner so as to preclude interfering with rail or transit traffic. These practices and requirements would reduce potential cumulative impacts to a less than significant level.

Depending on conditions at each work site, crews would be transported to the site or would arrive in private vehicles that are parked off road. Few if any existing parking spaces available to the public would be used. Materials would be transported to and from the ROW for the installation and replacement of towers/poles, and equipment and materials would be transported to substation sites.

The Proposed Project would generate no known impediments to road or trail access, rail service, or bus service. It would not conflict with planned transportation projects.

Movement of any heavy equipment would comply with weight limits on roads and bridges. Movement of heavy transformers and similar equipment would be on vehicles designed to distribute weight so as to prevent road and bridge damage.

For the reasons identified above, few of the impacts associated with the Proposed Project have the potential to combine with the impacts of other project to create a cumulatively considerable impact. Those impacts from other projects that have the potential to combine cumulatively with impacts from the Proposed Project would be in the use of roads for delivery of labor and materials. However, in undeveloped areas traffic volumes are low, so this would not create a significant impact. In urban and urbanizing areas,

the volume of traffic associated with the projects is not sufficiently large to create a cumulatively considerable impact.

F.3.9 Public Health and Safety

Geographic Scope

For purposes of the cumulative analysis, the excavation, removal, and treatment/disposal of contaminated soil is considered the only public health and safety issue. Impacts would occur only during construction and would be limited to the areas where concurrent construction is occurring. The geographic scope for the cumulative impact analysis is the actual area of disturbance created by a project. Issues related to air and water are discussed in their respective sections.

Significance Criteria

With regard to environmental contamination, cumulative impacts resulting from the Proposed Project would be considered significant if concurrent construction of the Proposed Project and other local projects results in volumes of contaminated soil requiring offsite treatment/disposal that exceeds the capacity of the available treatment facilities.

During operation of substations, hazardous material use is restricted and containment structures are in place to prevent spills from reaching the environment. Therefore, this is not considered as contributory to a cumulative impact.

Analysis

For much of its length, the Proposed Project would traverse undeveloped and rural land. No significant quantities of contaminated soil are expected to be encountered during construction of the Proposed Project. While the potential amount of contaminated soil from all projects is unknown, disposal of contaminated soil is done according to specific regulations of the designated agency in each state. Disposal facilities serve large regions (or even interstate needs), therefore it is reasonable to assume that adequate disposal capacity would be available for any contaminated soils found on the project sites.

Implementation of the APMs and Mitigation Measures in Section D.10.6, would ensure that the cumulative effect of the Proposed Project and other projects with regard to public health and safety would be less than significant.

F.3.10 Air Quality

Geographic Scope

For air quality, the potential geographic scope of the cumulative impact analysis covers four counties and several air basins. While air quality is a regional phenomenon, with regionally cumulative impacts could extend over entire air basins and beyond, the identification of cumulative projects for air quality often ranges from one to six miles or more from a Proposed Project.

During operation the Proposed Project has very minor emissions, as it does not have fuel combustion sources or chemical processes that would contribute to air quality problems. Therefore, the cumulative impact discussion is focused on construction impacts.

Construction impacts are localized and of short duration. Therefore, only projects within one mile of the project route, as well as projects that could impact traffic during the project construction are considered projects that could, with the Proposed Project, cause cumulative impacts. Additionally, only projects that are scheduled to be constructed concurrently in the same area as the Proposed Project are considered as projects that could contribute to cumulative impacts. The complete cumulative project list is provided in Table F-1.

Only those projects listed in Table F-1 that have been identified within one mile of the Proposed Project and that have the potential for temporally overlapping emissions with the Proposed Project are considered potential cumulative projects. However, the construction schedule of many of these projects is uncertain, so there is the potential that a number of these projects will not have construction periods coincident with that of the Proposed Project.

Significance Criteria

Cumulative air quality impacts of the Proposed Project and cumulative projects would be considered significant if activities associated with the Proposed Project and other projects would cumulatively:

- generate emissions of air pollutants that would exceed regional air quality thresholds (see Table D.11-11) or create annual emissions within an attainment area greater than the U.S. EPA basic Prevention of Significant Deterioration emission thresholds of 250 tons per year of any pollutant.
- cause or contribute to any new violation of air quality standards in the project area; or interfere with the maintenance or attainment of air quality standards; or increase the frequency or severity of any existing violations of air quality standards; or delay the timely attainment of any standard, interim emission reduction, or other air quality milestone promulgated by the U.S. EPA, or any State or local air quality agency.

Analysis

Operational emissions would not have the potential to significantly increase regional cumulative emissions, as they are the result of vehicle use for limited routine maintenance and inspection. The Proposed Project has significant temporary regional construction emission cumulative impacts within the Mojave Desert Air Quality Management District (MDAQMD) and South Coast Air Quality Management District (SCAQMD), as described below.

Projects

The Palo Verde Hub to TS-5 500 kV Transmission Project would be located approximately 2 miles or more east of the Proposed Project and roughly parallel it for approximately 6 miles. Minor air quality impacts are associated with construction. Because of their minor nature, they would not contribute considerably to a cumulative impact. For there to be a risk of any cumulative effect, the Proposed Project and the Palo Verde Hub project would have to be constructed simultaneously. Even in that case, because of the distance between them, there would be no discernible cumulative effect. Therefore, the project would not result in cumulative impacts in Arizona

A number of projects were identified in California in both the MDAQMD and SCAQMD jurisdiction. These future and proposed construction projects within one mile of the Proposed Project could result in cumulative air quality impacts. There is the possibility that a variety of projects, mainly roadway improvements or local residential development, would occur at the same time as construction of the Proposed Project. Pollutants generated from construction of these projects could result in an impact on ambient

air quality that would overlap with those of the Proposed Project, if the construction work occurs in close proximity as well as at the same time. Construction of the cumulative projects could further exacerbate the potentially significant project-related construction impacts (Impact A-1). Mitigation measures identified for the Proposed Project would remain applicable. Other cumulative projects would also need to comply with local ordinances prohibiting nuisances or requiring dust control. Section D.11 provides a more detailed description of the effects of the Proposed Project on air quality and the MDAQMD and SCAQMD CEQA significance determination methodologies. The Applicant Proposed Measures (APMs) for air quality and air quality mitigation measures recommended for the Proposed Project would reduce cumulative construction impacts to a less than significant level within MDAQMD jurisdiction, but impacts would remain significant after mitigation within SCAQMD jurisdiction.

Projections

In Arizona, the Proposed Project route (through Maricopa County Air Quality Department jurisdiction in Maricopa County and Arizona Department of Environmental Quality jurisdiction in La Paz County) and traverses areas in attainment with all applicable ambient air quality standards. Therefore there are no air quality plans or projections for reaching attainment. The operation of the Proposed Project will require minimal direct emergency engine testing and maintenance emissions, and would result in indirect emissions from additional power production forecast for power plants within Arizona. The additional power plant emissions aggregate from small increases at several facilities in locations around the State, within existing permit limits, that would not significantly impact any single attainment or non-attainment area in Arizona. Therefore, the Proposed Project's direct and indirect project emissions would be consistent with the local air quality rules, regulations, and attainment plans, and no cumulatively considerable air quality impacts would occur.

In California, local air quality rules, regulations, and attainment plans direct how MDAQMD and SCAQMD would eventually achieve attainment of the federal and California ambient air quality standards (see Section D.11.2.4 for additional description of the MDAQMD and SCAQMD attainment plans). A project may be deemed inconsistent with applicable air quality plans if it would result in stationary sources that would not comply with local rules and regulations or if it would induce population and/or employment growth exceeding the growth estimates included in the attainment plans. The operation of the Proposed Project will result in minimal direct emergency engine testing (MDAQMD jurisdiction) and maintenance emissions, and would result in indirect emission reduction from a reduction in power production forecast for power plants within California. Because no substantial emission increases would result from the Proposed Project, it would be consistent with the local air quality rules, regulations, and attainment plans, and no cumulatively considerable air quality impacts would occur.

F.3.11 Water Resources

Geographic Scope

With regard to water quality, the geographic scope of the cumulative impact analysis includes the ADEQ Colorado/Lower Gila and Middle Gila Watersheds and the California State Water Resources Control Board Colorado River and Santa Ana regions. Although these regions contain watercourses not crossed by the project, they represent the administrative units for water quality control through which the project must pass.

With regard to cumulative impacts not related to water quality, such as potential impacts on flooding and erosion, the geographic scope includes Maricopa and La Paz Counties in Arizona and Riverside and San Bernardino Counties in California. These counties, together with the cities contained within, are the administrative units responsible for floodplain and flood hazard administration.

Projects related to hydrology and water resources consist of all development, construction and agricultural projects within the geographic areas of consideration. For purposes of this analysis, the comprehensive plans and regional water agency documents listed in Table F-2 were considered when identifying activities that could contribute to cumulative impacts.

Significance Criteria

With regard to water resources, the contribution of cumulative impacts from the Proposed Project would be considered significant if the project, in conjunction with all other projects in the indicated area, would:

- Create new sources of polluted runoff, or otherwise substantially degrade water quality
- Deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)
- Place within a watercourse or flood hazard area structures that would impede or redirect flood flows in a manner that would result in substantial erosion or siltation
- Increase the rate or amount of surface runoff in a manner that would result in increased flooding, or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Analysis

Cumulative water quality impacts are related to the total level of development and development-related activities in the geographic extent of the analysis. Existing development has the potential to produce non-point pollutants such as oil, grease, pesticides and fertilizers that can be washed into streams from developed and paved areas. In general, any new development has the same potential as the Proposed Project for construction-related impacts to occur related to sediment disturbance and accidental spills. The Proposed Project would make a less than significant contribution to both, mainly because of project size and the nature of the area the project would pass through.

Approximately 75 percent of the Proposed Project lies east of the Coachella Valley. With the exception of some farming areas, mainly along the Colorado River, this portion of the project would be on federal or State land for most of its length, in land designated in the respective County general plans as open space. Any future development in these areas is expected to consist mainly of a limited number of linear projects such as the one proposed.

Approximately 25 percent of the Proposed Project includes Coachella Valley and lands west to the project termini. A large number of projects have been identified in this portion of the project. Assuming ultimate build-out, existing and future development could create new sources of polluted runoff, or otherwise substantially degrade water quality. The Proposed Project's contribution would be small. The entire right-of-way of the project is less than 1 percent of the area that has been or could be subject to development between the Coachella Valley and the western terminus of the project. Total project-related disturbance within this area would be less than one tenth of one percent. Since the project itself has been determined to have a non-significant effect on water quality, and the project area is very small in relation to the cumulative area of influence, the project-related contribution to the cumulative degradation of water quality is not significant.

The project would have no impact on groundwater supplies and would therefore have no contribution to the cumulative impact on this resource.

Although some project structures may be placed within a watercourse or flood hazard area, the proposed mitigation measures would ensure that no adverse flood-related or erosion-related impact would occur. Further, the cities and counties along the route have floodplain regulations regulating future development to ensure that development does not impede or redirect flood flows. Therefore, a cumulative adverse impact from watercourse encroachment is unlikely.

Cumulative development in and west of the Coachella Valley is likely to increase the rate or amount of surface runoff in a manner that could increase flooding or exceed the capacity of existing or planned stormwater drainage systems. This could occur through creating new impervious areas and increasing the efficiency of drainage channels. The Proposed Project would have no effect on drainage channel efficiency, and the new impervious area would be negligible in comparison to the watershed areas through which the project passes. The contribution of the Proposed Project to the cumulative increase in flood discharges therefore would be negligible.

The project would not involve housing and would have no cumulative effect on the placement of housing within flood areas.

F.3.12 Geology, Mineral Resources, and Soils

Geographic Scope

The geographic scope for considering cumulative impacts to Geology, Mineral Resources, and Soils is the Proposed Project corridor itself. This is because geologic materials, minerals, and soils occur at specific locales and are unaffected by activities not acting on them directly.

Significance Criteria

Potential cumulative geologic impacts consist of the loss of unique geologic features or known mineral and/or energy resources, or the triggering or acceleration of erosion or slope failures. Seismic impacts (groundshaking, ground failure, and fault rupture) comprise an impact of the geologic environment on the project and are not cumulative.

Analysis

Construction and operation of the Proposed Project would contribute a less than significant increase to potential cumulative impacts. In addition, Mitigation Measures and APMs in Section D.13.6 of this document that would minimize any project-related impacts and would further minimize the potential for cumulative effects. Because other identified projects in the project area would need to comply with erosion control requirements, the effects of these projects in conjunction with Proposed Project on the geologic environment are not cumulatively considerable.

F.3.13 Socioeconomics

Geographic Scope

The geographic scope for the analysis of impacts on socioeconomics consists of Maricopa and La Paz Counties, Arizona and Riverside and San Bernardino Counties, California. This is the geographic extent of the cumulative impact analysis because socioeconomic factors such as public services and utilities are provided by local jurisdictions or districts, and the local labor force is expected to come primarily from within these counties. In addition, public services and utilities plans and population and housing demand projections are prepared at the county level.

Table F-1 provides a list of projects for the socioeconomics cumulative scenario, and Table F-2 identifies applicable plans and projections.

Significance Criteria

Cumulative impacts resulting from the Proposed Project would be considered significant if the Proposed Project would considerably contribute:

- to an increase in substantial population growth in an area, either directly or indirectly necessitating the construction of housing
- to already existing significant utility disruptions from project's within the cumulative area of impact
- to the cumulative demand placed on water or solid waste facilities by cumulative projects within the geographic extent of cumulative impact, requiring the expansion or creation of new facilities.

Analysis

The Proposed Project would have an incremental contribution to existing cumulative effects, as described below. This would not be a significant or considerable addition and has been accounted for in various local and regional plans and projections.

Projects

As described in Section B, Project Description, the Proposed Project would be under construction from 2007-2009. Only those related projects under construction during that period would be considered for cumulative impacts of the construction population on housing and public services/utilities. Only those cumulative projects located within the Proposed Project ROW are considered for collocation impacts. Table F-1 identifies those projects that could result in cumulative impacts if constructed in conjunction with the Proposed Project. Specific cumulative impacts based on the significance criteria are described below.

Cumulative project-related construction workers could displace people from existing housing or require the addition of new housing. As described in Table F-1, the Palo Verde Hub to TS-5 500 kV Transmission Project, EOR9000 Project, Blythe II Power Plant Project, Blythe Energy Project Transmission Line Modifications, and Desert Southwest Transmission Line Projects are expected to be constructed in a similar timeframe as the Proposed Project. These projects and the Proposed Project would use construction workers from within the local labor force. The development of these projects in combination with the construction of the Proposed Project could result in an impact to the local housing market if construction workers were to relocate into the area.

In 2000, Maricopa, La Paz, Riverside, and San Bernardino Counties contain a combined workforce that includes 295,755 construction workers and a total of 275,347 available housing units. Given the large construction workforce existing within the area and the amount of available housing, cumulative impacts as a result of construction workers on the local housing market are considered to be less than significant during Proposed Project construction.

Construction of any project that penetrates the ground could disrupt utility systems if such activities cut or disturb underground utilities during construction of the project. Prior to ground penetration, contractors obtain information on the location of underground utilities, thereby reducing the risk of disruption. The potential for disruption is project-specific and not cumulative.

Several transmission projects are being constructed or proposed within the same utility corridor (see Table F-1). The Oak Valley System Project, Blythe Energy Project Transmission Line Modifications, Desert Southwest Transmission Line Project, and the Los Angeles–Imperial Valley Transmission Line Project would be located within portions of the proposed DPV2 corridor. The Oak Valley System Project would share the ROW within the Banning and Beaumont segment in the City of Banning, while the Los Angeles–Imperial Valley Project would share the ROW from the Cactus City Rest Area to Devers Substation. The Blythe Energy Project Transmission Line Modifications would share the Proposed Project ROW in the Palo Verde Valley segment, and the Desert Southwest Transmission Line Project would share the ROW with the Proposed Project from the Palo Verde Valley segment west through to Devers Substation. West of Devers Substation, the Los Angeles–Imperial Valley Project would share portions of existing SCE ROWs from Devers Substation to Vista Substation and from the City of Banning to the City of Calimesa.

As none of these transmission projects has been constructed, there is no existing cumulative effect in the Proposed Project corridor. However, the siting of the Proposed Project in addition to the other transmission projects would significantly increase the potential for a collocation accident or a disruption to the utility system. It is likely that construction of some of these transmission projects would occur shortly before or after construction of the Proposed Project. Consequently, the Proposed Project would have a significant incremental contribution to potential utility disruptions. As required by California Government Code 4216-4216.9 and the Arizona State Underground Facilities Law, the SCE is required to contact a regional notification center at least two days prior to excavation of any subsurface installation. This would result in Underground Service Alert notifying the utilities that may have buried lines within 1,000 feet of the project. Adherence to this Code and law would serve to reduce the cumulative effects from collocation of proposed utility projects to a less than significant level.

Cumulative project construction would place demands on local water or solid waste services. According to regional planning documents (SCAG RCPG population projections, Maricopa County 2020 Comprehensive Plan projections, and the La Paz County Comprehensive Plan), the project vicinity is experiencing and will continue to experience significant demands for public services and utilities as a result of continued growth. In Maricopa County, this growth is centered in the Phoenix area, east of the Proposed Project and outside the immediate vicinity of the project. Agencies with development approval authority review individual project consistency with existing local and regional plans and programs. Both California and Arizona State laws require specific plans, projects, and planning and development programs to be consistent with local general plans. Therefore, when development proposals are consistent with local general plans, and those, in turn, are consistent with County and Regional Plans, the goals and policies of County and Regional Plans are implemented through the local actions on development proposals. As a consequence, if development projects in the cumulative area of impact are consistent with the applicable local government plan and policy documents, then the cumulative impacts of those projects have already been anticipated and accounted for and are, therefore, consistent with the plans and policies and are less than significant.

In addition, local planning agencies augment or develop water, wastewater and solid waste facilities to meet the anticipated needs of population projected for the region. The water, wastewater, and solid waste needs related to the Proposed Project are expected to be within the parameters of regional capacities, projections, and plans applicable to the geographic extent of the cumulative impact area. In addition, implementation of Mitigation Measure S-1, as described in Section D.14 (Socioeconomics), would further ensure that all solid waste impacts of the Proposed Project are reduced to the maximum extent feasible. Therefore, the current cumulative impact of all development projects within the cumulative area of impact on water and solid waste facilities serving the areas is less than significant (Class II) because the impacts of growth have already been anticipated and accommodated in approved plans.

Projections

Maricopa County 2020 Comprehensive Plan. The Maricopa County 2020 Comprehensive Plan contains a Growth Areas Element provides an overview of past, present, and future population and growth patterns, and a discussion of physical, built, and jurisdictional considerations for growth. Included in this Element is an overview of public issues regarding growth and a review of some of the potential physical, built, and jurisdictional considerations that may affect future growth and development patterns. The plan contains a range of policies and programs to meet future regional demand for public services, utilities, and housing. Given the rapid rate of growth in the area of impact, the Palo Verde Hub to TS-5 500 kV Transmission Project has been proposed by local jurisdictions in the Maricopa County area to meet the needs of proposed development projects in the area.

La Paz County Comprehensive Plan. The La Paz County Comprehensive Plan provides is the guide for development decisions by the County Planning and Zoning Commission and Board of Supervisors. Policies contained within the Plan are designed to guide future growth and development patterns, and to meet future demand for public services, utilities, and housing in the region.

Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Guide (RCPG). Impacts to public services and utilities are usually associated with population in-migration and growth in an area, resulting in increased demand for a particular service leading to the need for expanded or new facilities. The Southern California Association of Governments (SCAG) has made regional demand predictions through 2015 for public services and utility systems in the southern California region. This region includes SCAG's San Bernardino County Association of Governments (SANBAG) Subregion, and Coachella Valley Association of Governments (CVAG) Subregion, which covers Riverside County.

SCAG projections show a steady increase in demand for services due to a steady increase in growth. SCAG has accounted for the expected increased need for services and utilities, as well as housing, in this region in the RCPG. In addition, SCAG is currently implementing a range of policies and programs to meet future demand for public services, utilities, and housing in the region as explained in the SCAG Regional Comprehensive Plan and Guide (RCPG).

The following plan and policy documents have been reviewed by SCAG and incorporated into the RCPG's projected needs for public services and utilities for the SANBAG and CVAG Subregions:

- County General Plans: San Bernardino County General Plan and Riverside County Integrated project 2002 General Plan
- City General Plans: Loma Linda, Redlands, Calimesa, Beaumont, Banning, Palm Springs, Cathedral City, Indio, and Blythe.

Given the rapid rate of growth in the area of impact, numerous public works projects have been proposed by local jurisdictions in the SANBAG and CVAG Subregions to expand public services and utilities facilities to meet the needs of all of the proposed development projects in the area.

F.4 Cumulative Impact Analysis of Alternatives

Potential cumulative impacts associated with alternatives to the Proposed Project have been evaluated in addition to cumulative impacts associated with the Proposed Project. Several of the alternatives consist of substitutions for various segments of the Proposed Project. These would depart from the project at one location and rejoin it at another. Other alternatives would create different end points for the project.

In comparing an alternative with that portion of the Proposed Project that it would replace, there would be differences in the amount of a resource affected. However, when viewed in the cumulative context, these differences do not result in a difference in the significance in cumulative impacts as compared to the Proposed Project. None of the alternatives, if adopted, would reduce a significant cumulative associated with the Proposed Project impact to a less than significant level, nor increase a less than significant cumulative impact to a significant impact.

In Arizona, there are three alternatives that would modify the eastern end of the Proposed Project. One is the Harquahala-West Alternative that would follow a more direct alignment from the Proposed Project in eastern La Paz County to the Harquahala Substation by way of an alternate route south of I-10. Another is the Palo Verde Alternative, which would extend the Proposed Project to the Palo Verde Nuclear Generating Station, rather than the Harquahala Generating Station Switchyard. The third is the Harquahala Junction Switchyard Alternative that would construct a new switchyard approximately 5 miles east of Harquahala Substation, thereby creating a new terminus for the Proposed Project. Each of these has its own set of alternative-specific impacts, as evaluated in Section D. With the exception of the Palo Verde Hub to TS-5 500 kV Transmission Project, there are no other projects in the vicinity of any of these alternatives that would contribute to the cumulative scenario. With regard to visual resources, the Palo Verde Alternative would create a significant cumulative impact with the Palo Verde Hub to TS-5 500 kV Transmission Project. Otherwise, for the alternatives in Arizona, the level of potential cumulative impact for any one resource would be similar to that of the Proposed Project.

Between Blythe and Devers Substation in Riverside County, California, four alternatives are considered in the I-10 corridor. These include the Alligator Rock–North of Desert Center Alternative, the Alligator Rock–Blythe Energy Transmission Route Alternative, the South of I-10 Frontage Alternative, and the Desert Southwest Alternative. The potential impacts of each of these have been discussed in Section D. Because of the proximity of each alternative to another and the relatively few cumulative projects in the corridor, the cumulative impacts of each alternative would be similar to the cumulative impacts of the Proposed Project. Thus, in the I-10 corridor the level of potential cumulative impact for any one resource would be similar to that of the Proposed Project.

Aside from the Palo Verde Alternative in Arizona, the only substantial divergence of an alternative from the Proposed Project is the Devers-Valley No. 2 Alternative in western Riverside County. This would be an alternative to the West of Devers segment of the Proposed Project. It is the only alternative that occurs in an area with potential cumulative impacts owing to the large number of cumulative projects in the vicinity. Table F-3 identifies these projects related to the Devers-Valley Alternative, which are shown on Figure F-4 (see enclosed CD).

This alternative would use an existing SCE ROW to connect Devers Substation to Valley Substation west of Hemet. The Devers-Valley Alternative would diverge from the Proposed Project less than 2 miles west of Devers Substation. For about 20 miles the alternative would roughly parallel the south side of the Proposed Project. The distance between the Proposed Project and the Devers-Valley Alternative varies from 0.5 to 3 miles in this area. In the Banning-Beaumont vicinity, the Devers-Valley Alternative would diverge sharply from the Proposed Project, heading southwest for approximately 12 miles to Valley Substation. The area from Beaumont to Valley Substation includes projects not previously included as part of the cumulative scenario for the Proposed Project.

Geographic Scope and Significance Criteria

For all resources, the geographic scope (area included in the analysis of each resource) and significance criteria used for the cumulative analysis of alternatives are the same as those applied to the cumulative analysis of the Proposed Project, which is discussed in Section F.3. Where the alternative locations are close to the Proposed Project, the cumulative scenario is the same for both the Proposed Project and each alternative.

Analysis

Biological Resources

In Maricopa County, Arizona, a lack of projects that would make up a cumulative scenario results in few cumulative impacts. As a consequence, implementation of the Harquahala-West, Palo Verde, and Harquahala Junction Switchyard Alternatives would not have a cumulatively significant impact on biological resources. The Palo Verde Hub to TS-5 500 kV Transmission Project would roughly parallel a portion of the Palo Verde Alternative, but would be sufficiently far from the alternative so as to not have a significant cumulative impact on biological resources.

Implementation of the Palo Verde Alternative would extend the length of the transmission line and increase impacts to native habitat. This alternative would also result in impacts to Category II designated Sonoran Desert tortoise habitat and xeroriparian habitat, although these impacts would not be significant.

In Riverside County, California, with the exception of the Devers-Valley No. 2 Alternative, construction and operation of the alternatives were found to have a cumulative effect on biological resources similar to those of the Proposed Project. The analysis provided in Section F.3 applies to each of the alternatives as well as the Proposed Project. Even though the lengths of each of the alternatives around Alligator Rock are slightly longer than the Proposed Project (0.57 to 1.2 miles), the effects of these alternatives on biological resources are similar to the Proposed Project. The increase in the length of the transmission line that would result with implementation of any of these alternatives would not contribute significantly to cumulative impacts. With each of these alternatives, the APMs and mitigation measures to protect biological resources would reduce the cumulative impacts on biological resources to less than significant levels.

The Devers-Valley No. 2 Alternative differs from the Proposed Project in that it will traverse the Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, San Jacinto Wilderness Area, and the Potrero ACEC. The route of the alternative stays within existing utility corridors and the impacts of construction on the biological resources in the corridor are expected to be similar to what was described for the Proposed Project in the hills north of Cabazon and Banning and in the areas between Beaumont and the Vista Substation. The impacts from constructing the D-V alternative within

the National Monument, the National Forest, the Wilderness Area, and the ACEC are potentially significant. But, with the implementation of the biological APMs and mitigation measures, the cumulative impacts would be reduced to a less than significant level.

Given the cumulative impacts on the biological resources that would occur from the construction of multiple projects in the San Jacinto Valley, the construction of the D-V alternative would contribute only incrementally to the cumulative effect on biological resources. Moreover, any potentially significant cumulative impacts resulting from the construction of the alternative in conjunction with other projects in the cumulative scenario would be mitigated to a less than significant level (Class II) through the implementation of the APMs and mitigation measures applicable to biological impacts.

Visual Resources

In Maricopa County, Arizona, the three project alternatives would share many of the same characteristics of the one cumulative industrial project here — the Palo Verde Hub to TS-5 500 kV Transmission Project.

The Harquahala-West Alternative and the cumulative project would appear as distinct corridors and would contribute to a sense of proliferation of energy infrastructure in the I-10 corridor. However, given distance between the two projects and their different orientations relative to views from I-10, the resulting cumulative visual impact would be adverse but not significant (Class III).

In the case of the Palo Verde Alternative, it and the cumulative project would appear as distinct corridors and would contribute to a sense of proliferation of energy infrastructure and a perceived increase in industrialization of the landscape when viewed from local roads. The resulting cumulative visual impact would be substantially greater than that which would occur with the alternative alone and would be significant (Class I). Although the Class I cumulative impact would not be reduced to levels that would be less than significant, Mitigation Measure V-3 is recommended to reduce the resulting adverse cumulative visual impact that would occur. In this case, Mitigation Measure V-3b (the pairing of structures) essentially would require the consolidation of the two corridors to the extent possible. For example, the Palo Verde Hub Transmission Line alignment should be revised to parallel the SCE Palo Verde Alternative alignment (and then the Proposed Project alignment) from Palo Verde Nuclear Generating Station until it reaches the north side of I-10, rather than creating a new corridor through the Palo Verde Hills and a new crossing of I-10 in relatively close proximity to the DPV1/DPV2 crossing.

The Harquahala Junction Switchyard Alternative potentially would be within the same field of view as the cumulative project, but approximately 1.2 miles or more distant and separated by the Palo Verde Hills. Given the distance between the two projects and their separation by the intervening hills, the resulting cumulative visual impact would be adverse but not significant (Class III).

In Riverside County, four project alternatives are in the I-10 corridor. These are the Alligator Rock–North of Desert Center Alternative, the Alligator Rock–Blythe Energy Transmission Alternative, the Alligator Rock–South of I-10 Frontage Alternative, and Desert Southwest Alternative.

During construction of any of these four alternatives, they would be within the same field of view as one or more of the cumulative scenario transportation projects, also under construction. At that time, adverse visual impacts would result from the visible presence of construction equipment, vehicles, materials, and personnel. However, these impacts would be temporary and would not create significant cumulative effects.

There are also a number of projects (commercial, residential and mixed-use) that would be visible within the same field of view as the Desert Southwest Alternative. However, all of these development projects would (a) be consistent with other commercial, residential, mixed uses in the region; (b) not appreciably change the character of the existing, rapidly developing suburban landscape; and (c) not share the same

or similar industrial character as the alternative. Therefore, this alternative would not result in cumulative visual impacts with the residential, commercial, or mixed-use development projects.

Any of the I-10 alternatives, in conjunction with these cumulative projects would not result in visual impacts noticeably different than those that would occur with an alternative alone. Therefore, the alternatives would not result in cumulative visual impacts with these projects. To the extent that the resulting cumulative visual impacts are perceived, they would be adverse but not significant (Class III).

There are cumulative energy infrastructure projects that may occur in the I-10 corridor. They are the Blythe Energy Project Transmission Line Modifications and the Desert Southwest Transmission Project. These would have many of the same characteristics as the alternatives, and would be within the same field of view as the alternatives at various locations. These projects would exhibit similar vertical structural form, structural complexity and industrial character compared to the alternatives.

Any of the alternatives and the cumulative energy infrastructure projects combined would result in a perceived increase in industrialization of the landscape, contributing to a sense of proliferation of energy infrastructure in the vicinity. The resulting cumulative visual impacts would be substantially greater than those that would occur with the Alternative alone and they would be significant (Class I).

Although the Class I cumulative impacts would not be reduced to levels that would be less than significant, Mitigation Measure V-3 is recommended to reduce the resulting adverse cumulative visual impacts that would occur. In these cases Mitigation Measure V-3b (the pairing of structures) essentially would require the consolidation of the separate corridors to the extent possible. For example, the Blythe Energy Project Transmission Line and the Desert Southwest Alternative should parallel the existing DPV1 line in the vicinity of Alligator Rock. Further, the Los Angeles–Imperial Valley Transmission Line and the Desert Southwest Alternative should parallel the DPV1 alignment in the Coachella Valley

The final alternative is the Devers-Valley Alternative that would occur west of Devers Substation. As with other alternatives, to the extent that the Devers-Valley Alternative would be visible during construction within the same field of view as one or more of the cumulative projects also under construction, adverse visual impacts would result from the visible presence of construction equipment, vehicles, materials, and personnel. However, these visual impacts would be temporary and would not create significant cumulative effects.

There are also a number of development projects (commercial, residential, recreational, and mixed-use) that would be visible within the same field of view as the Devers-Valley Alternative. However, all of these development projects would (a) be consistent with other commercial, residential, recreation, mixed uses in the region; (b) not appreciably change the character of the existing, rapidly developing suburban landscape; and (c) not share the same or similar industrial character as the alternative. Therefore, this Alternative would not result in cumulative visual impacts with the residential, commercial, or mixed-use development projects. To the extent that the resulting cumulative visual impacts are perceived, they would be adverse but not significant (Class III).

There are three cumulative projects (all communications projects) that would share many of the same characteristics of the Devers-Valley Alternative (structurally complex with industrial and technological character), and would be within the same field of view as the alternative. Two of the projects (a 70-foot monopole with slimline antennas and a 34-acre telecommunications site) are located in the same general flat agricultural landscape between Ramona Expressway on the south and Gilman Springs Road on the north. The third project (building expansion with 14 antennas 9 to 18 meters high) would be located further to the south, near Juniper Flats Road. In all three cases, the Devers-Valley Alternative and the cumulative project combined would result in a perceived increase in industrialization of the landscape.

The resulting cumulative visual impacts would be greater than those that would occur with the Alternative alone and they would be significant (Class I).

There are also five cumulative industrial projects (two batch plants, and three energy infrastructure projects — 670 MW power plant, natural gas compressor, and gas and diesel fuel storage tanks — that would share some of the same characteristics of the Devers-Valley Alternative and would be within the same field of view as the alternative. These projects would exhibit similar structural complexity and industrial character as the alternative. Also, all five of these cumulative projects would be located within relatively close proximity to the southern terminus of the alternative at Valley Substation.

In all cases, the Devers-Valley Alternative and the cumulative projects combined would result in a perceived increase in industrialization of the landscape. Also, in the cases where multiple industrial projects become visible, the projects would contribute to a sense of proliferation of industrial facilities within, and in the vicinity of, SR 74.

The resulting cumulative visual impacts would be substantially greater than those that would occur with the alternative alone and they would be significant (Class I). Given the diversity of project types contributing to the significant cumulative impact, no specific mitigation measure can be recommended that would measurably reduce the cumulative visual impact.

Land Use

With the exception of the Devers-Valley No. 2 Alternative, construction and operation of the alternatives would have a cumulative effect similar to the Proposed Project (see Section F.3.3).

Potential cumulative impacts resulting from the construction of the alternative in conjunction with other projects would be mitigated to a less than significant level (Class II) through the implementation of Mitigation Measures L-1a (Prepare Construction Notification Plan), L-1d (Coordinate with affected business owners), and L-1e (Coordinate construction schedule with public and community facilities).

Section D.4.9.1 discusses the impacts Alternative on existing residential and commercial land uses from construction and operation of the Devers-Valley No. 2. New residential and commercial/industrial developments have been proposed or are under construction within two miles of the alternative, with some of these development projects located adjacent to the alternative. Construction of the alternative would likely occur between 2006 and 2009. No definitive construction schedule is currently available for the proposed residential and commercial/industrial projects listed in Table F-3. It is likely that construction of some of these projects would overlap construction of the alternative. The construction of multiple projects within the same area would create a significant cumulative construction impact to adjacent residential land uses. Commercial land uses may be cumulatively impacted if access to these businesses were precluded during construction. Given the existing cumulative land use impact that would occur from the construction of multiple projects, the construction of the alternative would incrementally contribute to this cumulative effect. However, potentially significant cumulative impacts resulting from the construction of the alternative in conjunction with other projects would be mitigated to a less than significant level (Class II) through the implementation of the following mitigation measures discussed in Section D.4.9.1: Mitigation Measures L-1a (Prepare Construction Notification Plan), L-1d (Coordinate with affected business owners), and L-1e (Coordinate construction schedule with public and community facilities).

Operational impacts would occur to existing or proposed residential, commercial, or industrial land uses if the alternative would permanently disrupt or preclude these land uses. As discussed in Section D.4.9.1, the alternative would be located within or adjacent to an existing utility corridor. As such, the alternative would not change the existing land use types along the corridor. New projects that would be adja-

cent to the alternative must plan their development around the existing utility corridor. As the alternative would be located within or adjacent to this corridor, it would not conflict or preclude future developments. The alternative would not create an incremental contribution to any cumulative effect. No cumulative land use impacts would occur during operation of the Devers-Valley No. 2 Alternative.

Wilderness and Recreation

For wilderness and recreation resources, construction and operation of each of the alternatives was found to make an incremental contribution to cumulative conditions similar to that of the Proposed Project.

The alternatives in Maricopa County, Arizona, would not be located across or adjacent to any proposed recreation projects identified in Table F-1. Therefore, the cumulative impacts from alternatives in this area would be similar to those for the Proposed Project in this area.

Recreational resources that would be traversed by the alternatives in the I-10 corridor in Riverside County would also be traversed by several projects listed in Table F-1. These cumulative projects and each alternative would contribute to the cumulative effects on recreational resources. These would be significant and unavoidable cumulative impacts to affected recreation areas (Class I). Mitigation would do little to reduce the incremental contribution of the alternative to this cumulative effect.

The Devers-Valley No. 2 Alternative crosses recreational resources not otherwise affected by the Proposed Project or the other alternatives. The recreational resources that could be cumulatively affected by the construction or operation of the Devers-Valley Alternative include: Pacific Crest National Scenic Trail, Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, San Jacinto Wilderness Area, and the Potrero ACEC. None of the regional projects identified in Table F-3 would traverse these recreational resources. However, taken as a whole, cumulatively considerable impacts would occur to existing recreation areas within the geographic scope of the wilderness and recreation cumulative analysis. As such, operation of the alternative would contribute to a significant, cumulative effect to established recreation areas (Class I).

Agriculture

Similar to the cumulative impacts of the Proposed Project, construction and operational cumulative impacts to agriculture from the alternatives would be significant. While an alternative would affect more or less agricultural land than the corresponding section of the Proposed Project, any reduction in impacts to agriculture under all but one alternative would not be sufficient to reduce the cumulative impacts in the cumulative scenario to a less than significant level. The exception would be the Palo Verde Alternative, which would not have a significant impact on agriculture because, in substituting for a segment of the Proposed Project, it would convert less than 10 acres of Prime Farmland to other uses and would interfere with proportionally less agricultural operations. However, with the implementation of APMs L-4 and L-5, and Mitigation Measures AG-1a (Establish agreement and coordinate construction activities with agricultural landowners), L-1a (Prepare Construction Notification Plan), and AG-4a (Locate transmission towers and pulling/splicing stations to avoid agricultural), except for the permanent conversion of Farmland, the impacts would be reduced to a less than significant level.

Much of the Devers-Valley No. 2 Alternative would be in an area not located near the Proposed Project or other alternatives. However, it would permanently convert approximately 15 acres of Prime Farmland to other uses. This, too, would be considered a significant and unmitigable (Class I) impact. Development of other projects in the geographic area would also convert Farmland, adding to a cumulatively significant level of impact on agricultural land.

Cultural and Paleontological Resources

Cumulative cultural and paleontological resource impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Noise

Cumulative noise impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Transportation & Traffic

Cumulative transportation and traffic impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Public Health and Safety

Cumulative public health and safety impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Air Quality

For Air Quality, the potential geographic extent of the cumulative impact area for the project alternatives covers the same counties and air basins as the Proposed Project; however, the Palo Verde Alternative does extend east into the Phoenix-Mesa 8-hour ozone non-attainment area. Operational emission cumulative impacts for all alternatives are similar to those of the Proposed Project. The alternatives would have the similar potential for temporary regional construction emission cumulative impacts within the Mojave Desert Air Quality Management District (MDAQMD) and South Coast Air Quality Management District (SCAQMD).

Hydrology and Water Resources

Cumulative hydrology and water resources impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Geology, Mineral Resources, and Soils

Cumulative geology, mineral resources, and soils impacts are the same for all alternatives as for the Proposed Project. The analysis provided in Section F.3 for the Proposed Project applies equally to each of the alternatives.

Socioeconomics

All alternatives east of Devers Substation would be located in the vicinity of the Proposed Project. Cumulative impacts related to these alternatives would be the same as for the Proposed Project. West of Devers, the Devers-Valley No. 2 Alternative would traverse portions of Riverside County well away from the Proposed Project and would combine cumulatively with different projects than those in the cumulative scenario for the Proposed Project. However, cumulative socioeconomic impacts including these projects would be of the same type and magnitude as described for the Proposed Project.

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
Riverside County				
SUN VALLEY ENERGY PROJECT: Construction of a nominal 500 MW simple-cycle power plant, proposed by Valle del Sol Energy, LLC (California Energy Commission).	Industrial	Located in unincorporated Riverside County, near Romoland, approximately 15 miles south of project.	Filed Application for Certification with Energy Commission (12/01/05).	V-9
Construction of a 7.94-acre asphalt batch plant	Industrial	SE Corner of Hwy 74 & Antelope Rd	Expired 1995, but has final building permits	V-2
Construction phase 2 of a 4.61-acre concrete batch plant	Industrial	Se Corner Hwy 74 and Antelope Rd	Permit effective in 2000	V-3
Construction of a mortuary/crematorium & industrial warehouse. Phase I will consist of a 5,450 sq.ft. mortuary/crematorium building, and Phase II will consist of a 8,655 sq.ft. warehouse building.	Industrial	West Side of Palomar Road, Southerly of Ethanac Road	Expired 1999 but has final building permits	V-5
Construction of a 2.66-acre ARCO AM/PM Mini Mart Gas Station	Industrial	Southeast corner Hwy 74 and Menifee Rd	Expired 2002, but has final building permits	V-6
Construction of heavy equipment storage yard/warehouse/offices on 35.68 acres	Industrial	South of Ethanac north of McCall Rd west of Menifee Rd ease of 215 Fwy	Permit effective in 2001	V-7
Construction of a 670 MW natural gas-fired power plant on 45.87 acres	Industrial	North of McLaughlin Rd south of Ethanac Rd east of Antelope Rd	Permit effective 10/20/2005	V-8
Construction of a natural gas compressor site on 45.87 acres	Industrial	North of McLaughlin Rd south of Ethanac Rd 3/antelope Rd	Permit effective 2004	V-9
Construction of a 23-acre motocross education & training facility	Industrial	N/Ramona Expwy S/laird Rd E/hwy 79=Lamb Canyon W/California	Applied 2003	V-11
Add Gas & Diesel Fuel Storage Tanks	Industrial	E/s/o Palomar Rd N/o Mathews Rd S/o Hwy 74	Permit effective 2003	V-13
RECREATION CENTER FOR TR28996: Construction of 2.9-acre recreation center as part of an existing residential complex	Recreation	North and south of Aldergate Dr, west of Menifee Rd	Permit effective 2002	V-25
Contractor storage yard with residential unit in 10 acres	Industrial, Residential	E/o San Jacinto Rd SW of Russell Rd & AT&SF Railroad	Permit effective 2001	V-26

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
ALTA MESA PUMPED STORAGE HYDROELECTRIC PLANT: Construction of hydroelectric plant on 978 acres	Industrial	N I-10, W of Desert View, E of Whitewater Canyon Rd	Applied 7/31/2001	V-27
OFFICE/WAREHOUSE BUILDINGS--POLAR BEER SYSTEMS: construction on 2.1 acres	Commercial	N/o Bishop S/o Hwy 74 E/o San Jacinto Rd W/o Palomar Rd	Permit effective 2003	V-29
Contractor's Storage Yard On 10-Acre Parcel	Industrial	W/s Antelope Rd S/o Ethanac Rd	Applied 11/7/2002	V-30
EROSION CONTROL/CONTRACTOR STORAGE & FABRICATION YARD on 9.7 acres	Industrial	S/o Ethanac E/o Dawson W/o Antelope N/o McLaughlin	Applied 7/16/2003	V-31
10,800 sq ft LIGHT INDUSTRIAL BUILDING on 1.1 acres	Industrial	N/McLaughlin Rd S/Pinacate Rd E/Matthews Rd W/Palomar Rd/Hemet Ca	Applied 8/28/2003	V-32
70-ft Monopole W/Slimline Antennas & A 4-ft Dish Ant on 214 acres	Industrial	S/of Gilman Springs Rd W/or Hwy 79	Applied 11/05/2004	V-34
Renewal and 0.17-acre enlargement of restaurant	Commercial	N/Hwy 74 S/Monroe E/3rd St W/Antelope Rd	Permit effective 2004	V-35
Construction of 34-acre Telecommunication Site	Industrial	N/o Ramona Expressway E/o First Ave W/o Reservoir Ave	Applied 4/1/2005	V-36
MODEL HOME COMPLEX FOR TR31795-1 & TR31795-3: residential construction on 54 acres for Standard Pacific Homes	Residential	N/McCall S/Matthews Rd E/Menifee W/Briggs	Permit effective 10/28/2005	V-37
Commercial Center – 14 Bldgs 1 Gas Station – 347039 sq ft : construction of 37-acre complex	Commercial	N/hwy 74 S/Varela Ln E/Menifee Rd	Applied 10/21/2005	V-38
Installation of three 196-ft Meteorological towers on 253 acres	Industrial	N of Ave 16 E of Worsely Rd	Permit effective 11/10/2005	V-39
Construction of ONE INDUSTRIAL BLDG 9,350 sq ft & 2000 sq ft MEZZANINE on 1.1 acres	Industrial	S/Palomar W/Bishop Lane	Applied 11/04/2005	V-40
Installation of 2 97-ft Meteorological Towers on 331 acres	Industrial	N of Ave 16 E of Indian Ave	Permit effective 12/01/2005	V-41
2196 SQ FT ADDITION TO THE WEST SIDE OF THE EXISTING 5852 SQ FT BUILDING/1441 SQ FT FUTURE BUILDING EXPANSION/14 ADDITIONAL ANTENNAS VARYING IN SIZE FROM 9 METERS TO 18 METERS – MAX HT 75'	Industrial	N/o Montecito Dr S/o Stagecoach Rd E/o Juniper Flats Rd	Permits have been issued and substantial construction may have occurred.	V-42
Construction on 5 acres of 4 Group Home Units with 9 Children Per Unit	Residential	N/o Esperanza Ave S/o I-10 E/o Almond St W/o Elm St	Applied 9/30/2005	V-43

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
SP ON 1,508.4 ACRES FOR 2390 DU ON 585.3 acres, 213.6 acres of commercial (142.7 acres commercial, 52.1 acres commercial bus park, EA 34148, EIR 329, CGPA 224, CZ 5555)	Commercial	South of Hwy 74, East of Hwy 215	Effective 1994, will expire at the end of 2006	V-45
AMD Sp260 – Reduce Commercial/Residential/Park Reduce Commercial And Business Park Acres From 363.4 To 344.1 Acres To Medium Density Residential. Increase Residential Units From 2,390 To 2,677 In Planning Area 5,6,10,25,26,28,42, And 46. Increase Community Park From 12 Acres To 20.9 Acres And Relocate Community Center. Remove School Site From Pa 42 And Replace With Medium Density. Decrease School Acres From 28.7 To 18.7. Convert Business Park Area (Pa 26 And 28) To Residential.	Residential	N McLaughlin Rd & Mathews Rd/s Watson/w Juniper Flats Rd	Applied in 2002	V-46
SP PROPOSAL: 83 acres	Residential	N/Ethnac Rd S/Watson Rd E/antelope Rd W/Palomar Rd	Applied 8/22/2005	V-47
AMENDMENT NO 2 TO SP 301 affecting 1346 acres and Minor Change To Area Boundaries, acreage & Densities In Planning Area 1-13 For Compatibility With The Concurrently Proposed Tracts Tr31811 & Tr31812 affecting 1407 acres	Residential	N/Mathews Rd S/McLaughlin Rd W/Briggs E/Meniffee Rd	Effective 1/10/2006	V-48 and -49
796 Residences On 318 Ac W/park/open Space/school/basin	Residential, Education Facilities, Recreation	N/Mapes Rd S/mountain Ave E/215 Fwy W/Briggs Rd	Applied 10/28/2004	V-50
Divide 680 Acres Into 112 Lots (Only 78 Residential Lots On 461.49 Acres Recorded) Ea 10737 Sp 134	Residential	South of Nuevo Rd and Tyron Avenue, west of Juniper Flats Road	two development phases have been recorded	V-51
400 R-1 Lots & 8 R-5 Lots With A 7200 Sq Ft. Min. Lot Size Divide 226 Acres Into 390 Residential Lots With A 7200 Sq Ft Minimum Lot Size And 19 Golf Course Lots Ea 36020, Cz 6076	Residential/ Recreation	Westerly of Palm Springs and southerly of Highway 111.	A total of 50 building permits for new residences have been issued	V-58
Sched. A Subdivision Of 87 Acres Into 348 Lots	Residential	North of Pinacate Rd., Between Palomar Rd and Antelope Rd	Permit will expire 10/23/2006	V-60
Subdivide 63.48 Ac Into 192 Sing Fam Res Lots	Residential	N/o Rouse Rd and E/o Dawson Rd	Effective 7/6/2005, will expire 5/17/2008	V-61

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
Divide 236.08 Ac Into 513 Res & 3 Op Space Lots	Residential, Recreation	S/mc Laughlin Rd, E/Antelope Rd, N/chambers Rd, W/Palomar Rd	Applied in 2002	V-62
Divide 153 Ac Into 280 Lots, 10 Ac Parks, 65 Ac Rema	Residential, Recreation	N/Mapes Rd S/mountain Ave E/Menifee Rd W/Briggs Rd	Applied in 2001	V-63
Subd 243 Ac Into 322 Res Lots, 1 Det Basin Lot, & 5-Acre Park	Residential, Industrial, Recreation	S/o Nuevo Rd W/o Passage Rd	Applied in 2003	V-64
Subdivide 8.92 Acres Into 40 Lots	Residential	E of Avenida Valencia/N of Mapes Rd/ S of Alicante Dr	Applied in 2003	V-65
Schedule A Map Divide 71 Acres In 278 SFR R-1 Lots	Residential	SW Corner Rouse Rd and Menifee Rd	Effective 5/31/05, will expire 2008	V-66
Create 78 Residential Lots On 49.47 Ac	Residential	SW Corner of Mapes Rd & Malaga Rd	Applied 2003	V-68
Subdivide 40.17 Acres Into 141 SFR Lots And 1 Openspace Lot	Residential	E/o Trade Winds Dr N/o Mapes Rd	Effective 7/26/2005, will expire 2008	V-69
Divide 139.3 Acres Into 493 SFR Lots	Residential	McCall Blvd & Menifee Rd	Effective 2004, will expire 2007	V-70
Subdivide 205.2 Acres Into 573 Single Family Lots	Residential	N/McLaughlin Rd Between Briggs & Menifee Rd, S/state Rte 74	Effective 1/10/2006, will expire 2008	V-71
Divide 364.4 Ac Into 742 Res Lots W/Golf Course	Residential, Recreation	N Mathews Rd S/McLaughlin Rd W/Briggs E/Menifee Rd	Applied 5/24/2004	V-72
Subdivide 410.7 Ac Into 165 Lots Sched B Map	Residential	E/Sky Mesa Rd W/Jules Rd N/w/Juniper Flats Rd	Applied 4/7/2004	V-73
Sch "B" Subdiv.31.4ac Into(48)Single Family Lots	Residential	S/o Corso Alto Ave, W/o Hansen Ave	Effective 9/23/2005, will expire in 2008	V-74
Lost 5 Lots To Due To Sewer Issues Now 43 Not 48	Residential	N/Nuevo Rd S/Corso Alto Ave E/Corso Alto Ave W/Hansen Ave	Applied 11/29/2005	V-75
3 Parcels (64.5 Ac) Sub-Div Into 107 Lots In R-A	Residential?	N/Rowley Ln S/Montgomery Ave E/Sixth St	Effective 9/22/2005, will expire in 2008	V-76
Divide 49.9 Ac Into 85 SFR Lots	Residential	N/Corso Alto Ave S/park Ave E/Gibson Ave W/magnolia Ave	Applied in 2004	V-77

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
Subdivide 5 acres into 8 LOTS (1/2 MIN)	Residential	S/Esparanza W/Almond St N/Delores Ave	Approved 3/1/2005	V-78
Divide 20 Acres Into 69 SFR (7200 SF) Lots – Sch A	Residential	N/Mapes Rd S/Sparacio Rd E/antelope Rd W/Tradewinds Dr	Applied 9/30/2004	V-79
SUBDIVIDE 3.56 AC INTO 11 (7200 Sq Ft) LOTS (SCH A)	Residential	N/Watson S/La Puerta E/Parriso W/la Paloma	Applied 10/12/2004	V-80
Sub-Div 15.00 Ac Into (12) 1.00 Ac Parcels/Sch B'	Residential	S/o Contour Ave E/o Maurice St W/o Peters Ln (r-a-1 Zone)	Applied 3/24/2005	V-81
Divide 12.8 Acres Into 11 1-Acre Lots – Schedule B	Residential	N/contour Ave E/Maurice St W/peters Lane	Applied 4/28/2005	V-82
Subdivide 38.2 Ac Into 31 SFR Lots And 1 Os Lots	Residential	N/Mountain Av S/Ellis Av E/Antelope Rd W/Menifee Rd	Applied 10/31/2005	V-83
Sch A Map Subdvd Into 51 SFR Lots & 1 O/S Lot	Residential	N/Hwy 74 S/Watson E/Malone Ave W/Briggs Rd	Applied 8/11/2005	V-84
Divide 220ac Into 35 Residential Lots For Tr33762	Residential	N/Hwy 74 S/Montgomery & Contour Ave E/Menifee W/Juniper Flat	Applied 12/1/2005	V-85
38 LOT RESIDENTIAL SUBDIVISION In 4.5 Acres	Residential	N/NW Cor Broadway & Carmon	Applied 10/14/2005	V-86
Subdivide 12.5 Ac Into 21 SFR Lots/Sch B	Residential	N/Montgomery Ave S/Park Blvd E/11th W/Hansen Ave	Applied 12/9/2005	V-87
<u>Cabazon Ridge Project: large-scale wind farm proposed by White Water Energy.</u>	<u>Industrial</u>	<u>Between Snow Creek Road and I-10, extending up the western ridgeline of San Jacinto Mountains</u>	<u>Planning</u>	<u>N/A</u>
Banning				
Century Crowell: construction of residential buildings on 9.6 acres	Residential	0.3 mi south of I-10, 1.0 mi north of D-V	Under Construction	V-88
Century Crowell: construction of residential buildings on 6.5 acres	Residential	0.5 mi south of I-10, 0.8 mi north of D-V	Under Construction	V-89
Century Crowell: construction of residential buildings on 19.1 acres	Residential	0.5 mi south of I-10, 0.8 mi north of D-V, west and adjacent to V-89	Under Construction	V-90
Rochelle & Oberg: 5.8 acres	Residential	0.8 mi south of I-10, southeast of V-89	No activity; will expire 6/8/2006	V-91

Table F-3. Devers-Valley Cumulative Project List

Project	Type	Location	Status	Map ID
Carri Construction: 7.4 acres	Residential	0.5 mi south of I-10, 0.8 mi north of D-V, west and adjacent to V-90	Approved	V-92
C.W. Tefft: 452.7 acres	Residential	0.4 mi south of I-10, 0.5 mi north of D-V, west and adjacent to V-92	Approved	V-93
Stallion Estates: 145 acres	Residential	0.4 mi south of I-10, 0.5 mi north of D-V, west and adjacent to V-93	Approved	V-94
Martin: 4.1 acres	Residential	0.3 mi south of I-10, 0.7 mi north of I-10	Approved	V-95
Halem: 10 acres	Residential	0.4 mi south of I-10, 0.5 mi north of D-V, north and adjacent to V-93	In Review	V-96
United Pentecostal Church: 2.2 acres	Church	0.6 mi south of I-10, directly north of D-V and V-91	In Review	V-97
Sunset Crossroads/Sage Development: 548.4-acre gross site area, 378.8-acre 2,448 dwelling units, 18.4 acres commercial, 27.5 acres mixed use, 15.4 acres parks, 2.0 acres fire station, 23.9 acres linear parks/greenbelts	Residential, Recreation, Commercial, Mixed, Public Service	West of S Sunset Ave between W Lincoln St and W Westward Ave	In Review	V-98
Beaumont				
Seneca Springs/Empire Homes: 291.5 acres, 224.9 residential	Residential	South of I-10, west of Highland Springs Ave.	Under Construction	V-99
K. Hovnanian's Four Seasons: 570.6 acres, 423.7 residential	Residential	South of I-10, west of Highland Springs Ave.	Under Construction	V-100
Potrero Creek Estates: 737.1 acres, 307.8 residential	Residential	South of I-10, west of Highland Springs Ave.	Specific Plan 1989	V-101
Highland Crossing: 187.3 acres, 158.9 residential	Residential	Southeast corner of SR-79/Lambs Canyon Rd and California Ave	Pending Annexation	V-102
The Preserve: 1600 acres, 730 residential	Residential, Recreation	South of SR-60, northwest of SR-79	Specific Plan filed, annexation pending general plan update	V-103