

6.0 Cumulative Impacts and Other CEQA Considerations

This section addresses cumulative impacts and other considerations in accordance with the California Environmental Quality Act (CEQA), including growth-inducing impacts, significant and unavoidable adverse impacts, and significant and irreversible environmental changes, that may occur as a result of the proposed project.

6.1 Cumulative Impacts

In accordance with CEQA (CEQA Guidelines Section 15130 *et seq.*) this EIR analyzes the cumulative impacts of the proposed project in conjunction with other developments that affect or could affect the project area. According to CEQA, a cumulative impact refers to two or more individual effects that are considerable when taken together, or that compound or increase other environmental impacts (CEQA Guidelines Section 15355). CEQA requires the cumulative impacts discussion to reflect the likelihood that the impacts would occur and their severity if they did occur, but allows the discussion to contain less detail than must be provided for individual impacts. To comply with CEQA, a cumulative scenario has been developed that identifies and evaluates past, present, and reasonably foreseeable future projects within the cumulative study area that would be constructed or commence operation during the timeframe of activity associated with the proposed project.

6.1.1 Methods

A list of development projects within the cumulative study area were identified and are presented in Table 6-1. The list includes past projects, projects under construction and approved, and pending projects that are anticipated to be either under construction or operational by the time of the completion of the proposed project. Because the area within which a cumulative effect can occur varies by resource area, for the purpose of this analysis, the geographic scope also varies according to the resource being evaluated. For example, traffic and noise impacts tend to be localized while air quality and biological resources impacts are typically widespread. Information pertaining to past, present, and reasonably foreseeable future projects was obtained from the Planning Department and Division websites of the County of Santa Barbara, the County of Ventura, the City of Carpinteria, the City of Ventura, and the US Forest Service. Information on cumulative projects was also obtained from the California Office of Planning and Research (CEQANet Database) and Southern California Edison. Figure 6-1 depicts the location of each project. Each of the locations are labeled with a number that corresponds to those presented in Table 6-1. In instances where the analysis in Chapter 4, "Environmental Analysis," determines that the proposed project would result in no impact, the associated significance criterion is dismissed from the cumulative impacts analysis in Section 6.1.3.

This table does not include all projects that would contribute to cumulative impacts along with the proposed project; rather, it includes a number of concurrent projects in the area to demonstrate the scope and nature of development in Ventura and Santa Barbara counties. Where construction schedules are unavailable or uncertain, the cumulative impact analysis conservatively assumes that construction would overlap with the proposed project.

Table 6-1 Cumulative Projects within Five Miles of the Proposed Project

Project Number	Project Name	Description of Project	Distance from Nearest Project Feature (mi)	Project Status
County of Santa Barbara				
A1	Black Opal Ranch	Agricultural development plan for development over 20,000 square feet.	0.8	Application filed on September 19, 2010. Environmental Review not yet completed.
A2	La Estancia Serena Equestrian Center	Commercial horse training, breeding and boarding facility for up to 45 horses together with site improvements for the facility, as well as a residential remodel, new guesthouse, pool cabana, swimming pool, and a new private driveway.	3.1	Environmental document appeal period expired on April 21, 2014.
A3	Carpinteria Valley Farms	Development plan for building and structures in excess of 20,000 square feet.	3.9	Approved on April 1, 2009. Grading permit issued on August 5, 2013.
A4	Holani Farms Horse Boarding Facility	Commercial horse boarding facility for up to 23 horses. 20,805 square feet.	3.9	Application approved on June 2, 2010. Preconstruction condition monitoring underway as of August 29, 2013.
A5	Summerland Community Public Safety Center	Construction of a new fire station, meeting room, offices, kitchen bathrooms, sleeping rooms, 8,545 square feet of development.	4.6	Environmental review completed on October 18, 2012. Permit compliance review in progress as of August 22, 2013.
A6	Arroyo Parida Creek Bridge Replacement Project	Caltrans bridge replacement. Relocation of SCE Carpinteria-Ortega-Santa Barbara 66 kV subtransmission line and Sheffield 16 kV lines due to replacement of the Arroyo Parida Creek Bridge in Carpinteria.	1.8	Construction anticipated in 2014.
City of Carpinteria				
B1	Carpinteria Valley Arts Center	New 7,911 square foot community art center.	0.7	Project approved as of January 2014.
B2	Ellinwood/Green Heron Spring	Demo one unit, construct 30 new condos.	1.3	Project approved as of January 2014.
B3	Casa De Las Flores	43 apartments and a community center.	1.2	Project approved as of January 2014.

Table 6-1 Cumulative Projects within Five Miles of the Proposed Project

Project Number	Project Name	Description of Project	Distance from Nearest Project Feature (mi)	Project Status
B4	Lagunitas Mixed Use	37 single family developments, 36 condos, 85,000 square foot office.	0.8	Project approved as of January 2014.
B5	Dorrance Way Single Family Developments	Construct three new single family development.	0.9	Project approved as of January 2014.
B6	Fifth Street Cottages	Demo existing unit and construct two new units.	0.8	Project approved as of January 2014.
B7	Damiani Single Family Development	Construct one new single family development.	0.6	Project approved as of January 2014.
B8	Gonzales Condominiums	Demo one unit, construct four new condos.	0.9	Project approved as of January 2014.
B9	Paredon Project – Venoco	Extended Reach Oil & Gas Development.	1.1	Project proposed as of January 2014.
B10	Gobuty Condominiums	Construct two new units, subdivide for condos.	0.7	Project proposed as of January 2014.
B11	M3 Mixed Use Building	New 6,000 square foot commercial building & two apartments.	0.6	Project approved as of January 2014.
B12	Carpinteria Valley Water District Water Storage Tank Project	The project consists of a span bridge to replace an existing temporary rail car bridge with the new bridge. The new bridge will be a 108-foot long pre-fabricated steel truss bridge with a concrete deck and the existing ranch road was already realigned to provide an adequate turning radius. Bin walls have been installed to protect the road bank from storm flows and several storm drain outlets have been installed on Santa Monica Creek and its ephemeral tributaries.	0.7	Notice of Determination filed on October 5, 2012.
B13	Linden Ave – Casitas Pass Interchanges Project	Replacement of the Linden Ave and Casitas Pass Road Interchanges including wider overpasses, new ramp connections, and extension of the frontage road (Via Real). Relocation of approximately 20 SCE distribution poles that will be in conflict with Caltrans highway improvements.	0.5	Construction anticipated 2013-2016. SCE distribution poles to be relocated in 2014.
B14	Restoration of Carpinteria Creek	The Carpinteria Creek Watershed Coalition (CCWC) is restoring Carpinteria Creek to create natural and stable streams and vegetated banks to support steelhead trout. CCWC is working on numerous habitat restoration and steelhead trout restoration projects. CCWC also published Carpinteria Creek Watershed Assessment and Management Plan in March 2005.	0	Construction activities are on-going.

Table 6-1 Cumulative Projects within Five Miles of the Proposed Project

Project Number	Project Name	Description of Project	Distance from Nearest Project Feature (mi)	Project Status
B15	Schildknecht SFD	Construct one new single family development.	0.75	Project proposed as of January 2014
County of Ventura				
C1	PL12-0152	Development of a contractor service yard on 7.7 acres of a 22 acre parcel.	0.9	Preparing the environmental document as of April 2, 2014.
C2	PL12-0131	Eradication of noxious weeds along the riparian corridor of Rincon Creek.	0.2	Permit application undergoing completeness review as of July 1, 2013.
C3	PL13-0058	New wireless communication facility designed as a 65' tall 'faux' water tank.	2.7	Awaiting CUP application resubmittal as of April 2, 2014.
C4	PL12-0136	Conversion of existing contractor's service and storage yard into a Class II Oilfield Waste Disposal Facility. Class II fluids are waste streams associated with oil and natural gas production operations and primarily include: produced water, drilling mud, and tank bottoms.	4.9	Awaiting permit application resubmittal as of July 1, 2013.
C5	PL13-0074	Construction of a 6,000 square foot industrial building.	2.6	Permit approved on January 27, 2014
C6	PL12-0151	Construction of a new packing and processing facility.	3.7	Awaiting permit application resubmittal as of April 2, 2014.
City of Ventura				
D1	1900 S Victoria – Ghitterman	New 2 story office building.	3.3	Under construction as of April 1, 2014.
D2	Allied Beverage Company	134,797 square foot warehouse and maintenance building.	3.9	Under construction as of April 1, 2014.
D3	CMH – New Hospital	Construction of new hospital building (320,000 square feet and 230 beds), new street extensions, a new public plaza, and new area landscaping.	4.3	Under construction as of April 1, 2014.
D4	Cannery Row LLC	Mixed Use – Condominiums/Commercial.	4.9	Under construction as of April 1, 2014.
D5	Logue Family	Mixed Use – Condominiums/Commercial.	3.6	Approved on February 7, 2012.

Table 6-1 Cumulative Projects within Five Miles of the Proposed Project

Project Number	Project Name	Description of Project	Distance from Nearest Project Feature (mi)	Project Status
D6	Castillo Del Sol	Affordable housing for special needs residents, an on-site manager's unit and supportive services.	4.4	Approved on June 26, 2013
D7	Parklands Apartments	Apartments with community building.	1.5	Approved on September 5, 2012
D8	Hemlock Apartments	23 apartments.	4.7	Approved on May 11, 2011. In plan check as of August 12, 2013
D9	PROJ-04691	7 apartments	4.4	Under construction as of April 1, 2014.
D10	Island View Apartments	154-unit apartment complex.	3.3	Approved on November 19, 2012
D11	East Village Residential	50-unit low income apartment complex.	2.3	Approved on December 10, 2012
Southern California Edison				
E1	Santa Clara-Colonia 66-kV Subtransmission Line Reconductor Project	Reconductor approximately 11 miles of 66-kV subtransmission line to correct a potential N-1 condition if existing 3 rd party generators do not renew their contracts.	0	Construction anticipated in 2018.
E2	Moorpark-Santa Clara No. 1 & No. 2 220 kV – M3-T3	Repair or replace retaining wall in 220 kV (ROW).	2.8	Construction completed November 2013
E3	Santa Clara-Goleta No. 1 & No. 2 220 kV – M2-T1	Repair or replace retaining wall in 220 kV ROW.	0	Construction anticipated July – August 2014
E4	Santa Clara-Wakefield #1 & #2 66kV – M35-T1	Repair or replace retaining wall in 66 kV ROW.	3.5	Construction date TBD. May occur in late 2014 or 2015.
E5	Deteriorated Pole Replacement Program (DPRP)	The Deteriorated Pole Replacement Program is an ongoing inspection and maintenance program through which deteriorated wood poles are identified for replacement consistent with CPUC General Orders 95 and 165.	Various locations in Santa Barbara County and within the cities of Santa Barbara, Carpinteria and Goleta. Nearest is less than one mile from Segment 4.	Ongoing pole replacement activities anticipated to take place 2013 - 2018.

Table 6-1 Cumulative Projects within Five Miles of the Proposed Project

Project Number	Project Name	Description of Project	Distance from Nearest Project Feature (mi)	Project Status
E6	Transmission Line Rating and Remediation (TLRR) Program	The TLRR Program focus is on the evaluation and remediation of spans on SCE's transmission system that are in question of meeting CPUC GO 95 clearance criteria. Examples of remediation work typically may include relocating distribution lines and street lights from under transmission lines, modifying pole head configurations or tightening insulators or conductors, grading underlying areas to remediate clearance concerns, modifying or replacing towers/poles, or installing intersect towers/poles. Within the cumulative study area there are 14 locations that have been identified as work locations under the program.	Various locations in Ventura County. Nearest is less than one mile from Santa Clara Substation and Segment 1.	Construction anticipated 2015-2018.
E7	Carpinteria-Ventura Fiber Optic Cable Project	Installation of new fiber optic cable primarily on existing distribution facilities or underground primarily in existing ROW or franchise.	0	Construction anticipated 4 th Quarter 2015 due to permitting delays and route alternatives requested by Caltrans.
E8	Past Work in Project Area	Substation modifications at Carpinteria, Goleta, Isla Vista, Ortega, and Santa Clara substations. New subtransmission structures and 66 kilovolts (kV) conductor were installed in Segment 1 from Santa Clara Substation to Casitas Substation, and existing 66-kV conductor was removed. New subtransmission structures and 66 kV conductor were installed in Segment 2 from Casitas Substation to the 'Y' located near Casitas Pass just west of Lake Casitas in Ventura County, and existing 66 kV conductor was removed. New subtransmission structures and 66-kV conductors were installed in Segment 3A from Carpinteria Substation to the Santa Barbara/Ventura County line, and existing wood subtransmission structures were removed or topped. Subtransmission structures in Segments 1 and 2 were partially removed. Partial work was completed at the Getty Tap.	0	Construction completed between 1999 and 2004

Sources: City of Carpinteria 2014; City of Ventura 2014; County of Santa Barbara 2012; County of Ventura 2014a,b,c;; SCE 2014, Fehr and Peers Transportation Consultants 2007

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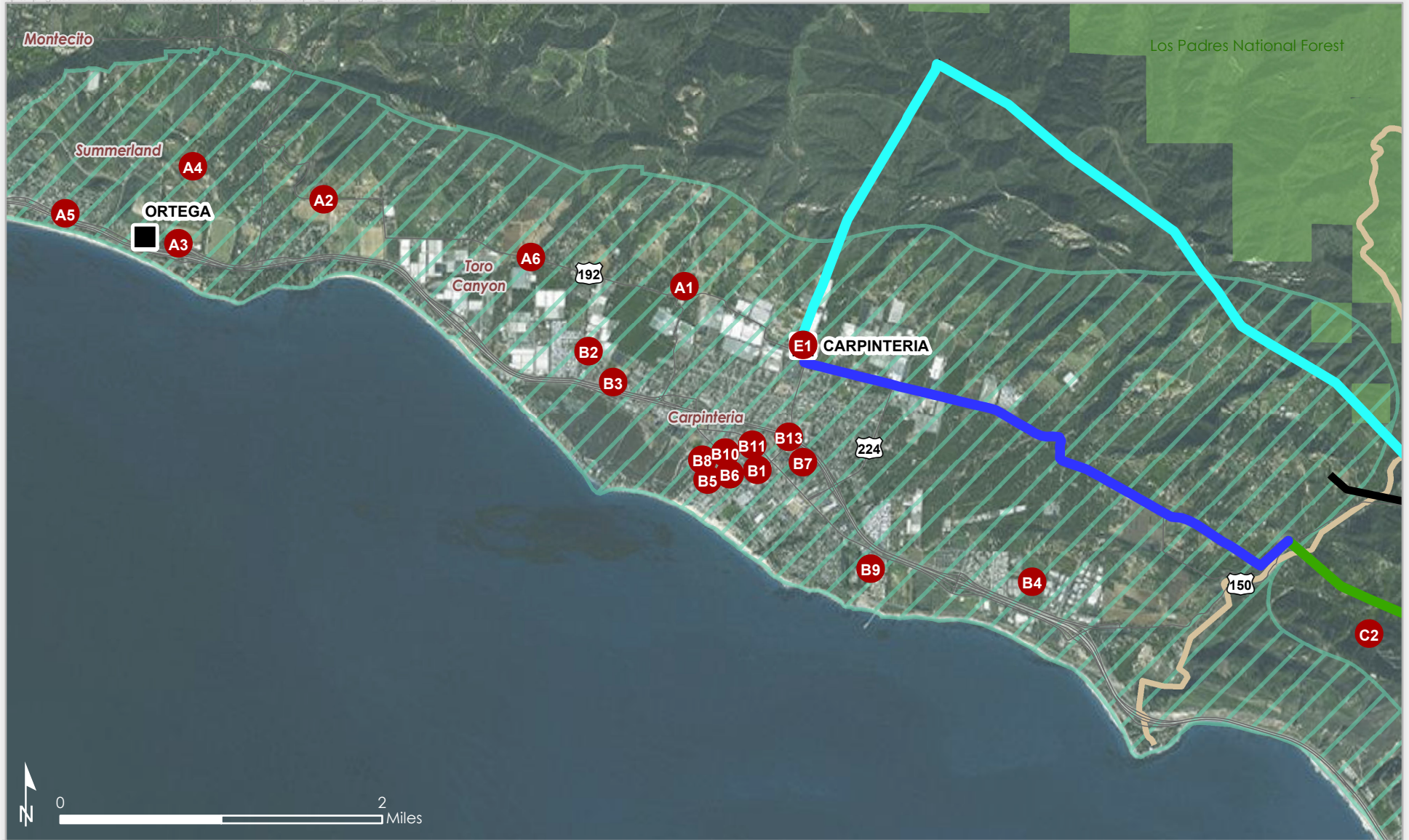
CPUC = California Public Utilities Commission

kV = kilovolt

TLRR = Transmission Line Rating and Remediation Program

DRPR = Deteriorated Pole Replacement Program

SCE = Southern California Edison



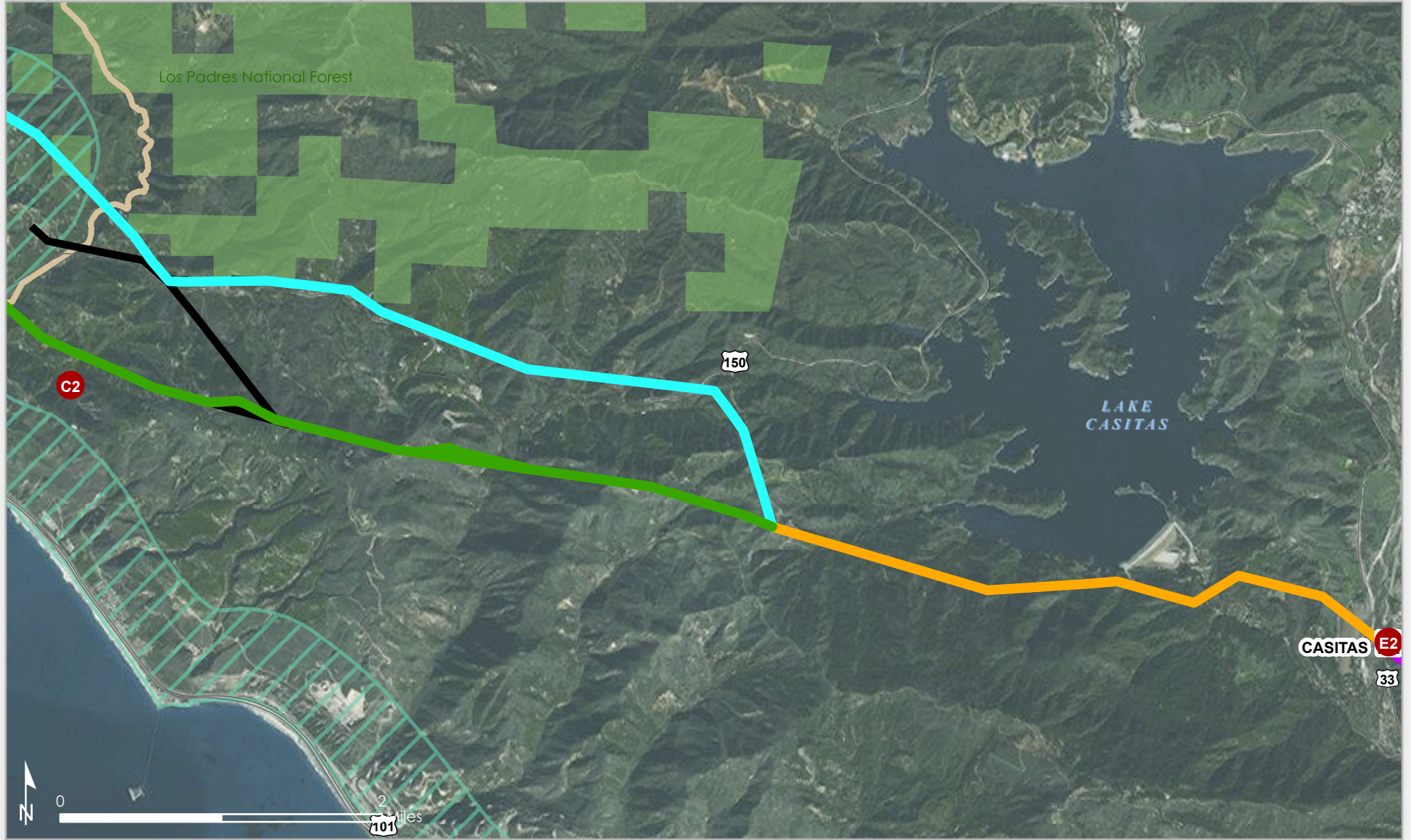
- Existing Electrical Subtransmission Lines
- Segment 1
- Segment 2
- Segment 3A
- Segment 3B
- Segment 4
- Segment 5

- Existing Substation Locations
- Getty Tap
- Los Padres National Forest (USFS)
- Major Roads
- County Boundary

- Bio Preserve Areas
- Coastal Commission Zone
- Cumulative Projects






**Figure 6-1a
Cumulative Projects**




Santa Barbara County
Reliability Project
Santa Barbara and
Ventura Counties California



Existing Electrical Subtransmission Lines

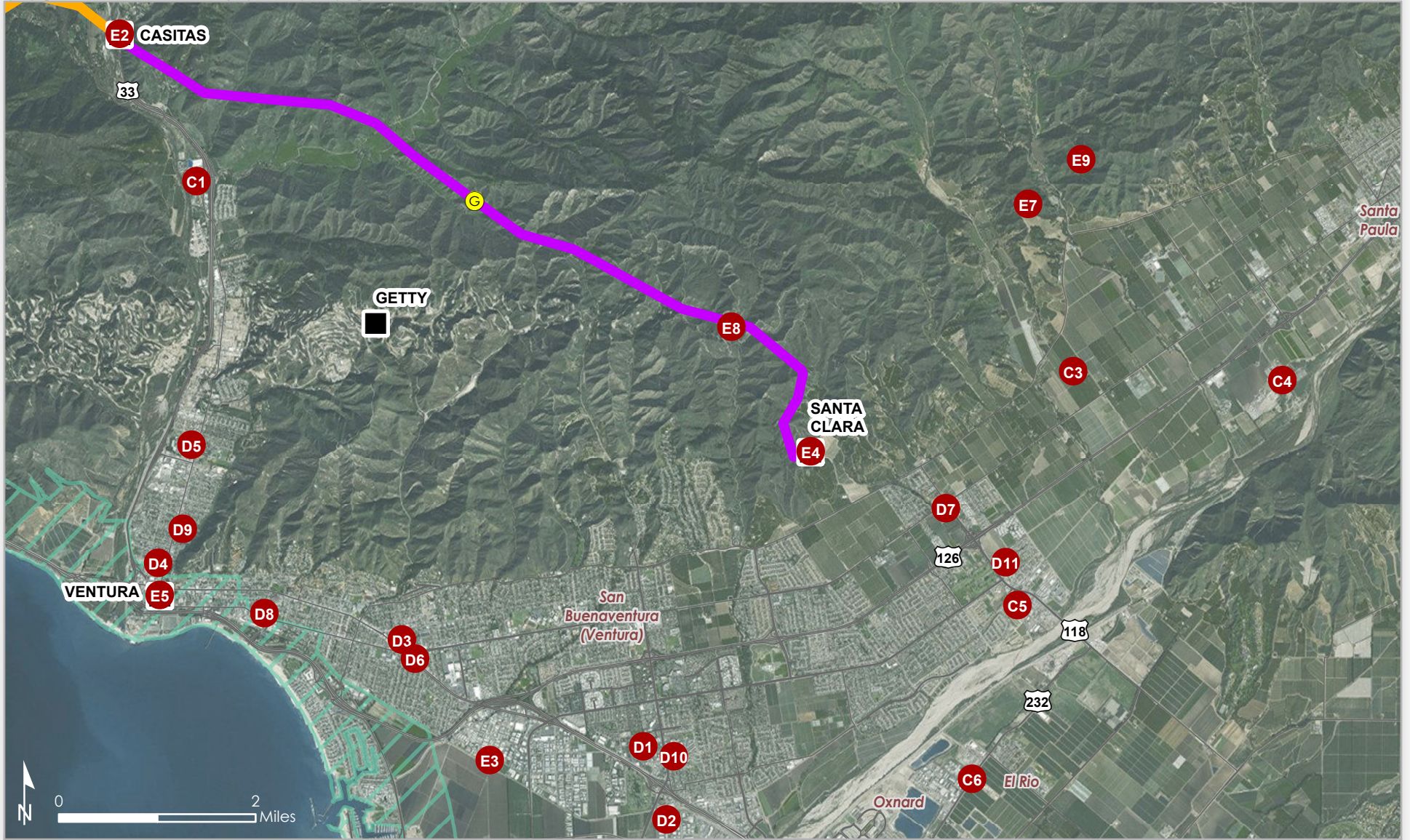
-  Segment 1
-  Segment 2
-  Segment 3A
-  Segment 3B
-  Segment 4
-  Segment 5

-  Existing Substation Locations
-  Getty Tap
-  Los Padres National Forest (USFS)
-  Major Roads
-  County Boundary

-  Bio Preserve Areas
-  Coastal Commission Zone
-  Cumulative Projects

**Figure 6-1b
Cumulative Projects**

Santa Barbara County
Reliability Project
Santa Barbara and
Ventura Counties California



Existing Electrical Subtransmission Lines

- Segment 1
- Segment 2
- Segment 3A
- Segment 3B
- Segment 4
- Segment 5

- Existing Substation Locations
- Ⓞ Getty Tap
- Los Padres National Forest (USFS)
- Major Roads
- County Boundary

- Bio Preserve Areas
- Coastal Commission Zone
- Cumulative Projects

**Figure 6-1c
Cumulative Projects**

Santa Barbara County
Reliability Project
Santa Barbara and
Ventura Counties California

1 **6.1.2 Cumulative Scenario**
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3 The proposed project would be located within the foothills of the Santa Ynez Mountains, a sub-
4 range of the Transverse Ranges. The proposed project would primarily occupy existing rights-of-
5 way characterized by open grazing lands, orchards, greenhouses, low-density residential
6 development, and chaparral-covered mountain slopes. Most areas in the immediate vicinity of the
7 proposed project are sparsely populated, with the exception of the western portions of Segments
8 3A and 4, which pass through residential areas at the edge of suburban Carpinteria. Given the
9 remote locations of the majority of the proposed project components, the vast majority of
10 reasonably foreseeable projects within the 5-mile cumulative study area are located within the
11 urban areas in the valleys to the west (i.e., City of Carpinteria) and southeast (i.e., City of Ventura)
12 of the proposed project. A 5-mile cumulative study area was used to identify reasonably
13 foreseeable projects because it was sufficiently large to capture additional projects that have the
14 potential to contribute to cumulative impacts and captured all of the various landscapes and
15 resource areas that the project transverses.
16

17 **Residential Projects**

18 A number of residential projects have been proposed within 5 miles of the proposed project in the
19 cities of Carpinteria and Ventura. These projects are in various stages of development; some have
20 been partially constructed, and some may be constructed simultaneously with the proposed
21 project, depending on when permits are approved. All residential developments would have the
22 same type of impacts, such as temporary and permanent increases in traffic, air emissions, and
23 changes in the visual landscape.
24

25 **Commercial and Retail Developments**

26 The proposed project components are located within 5 miles of numerous commercial and retail
27 developments in the cities of Carpinteria and Ventura. These projects are in various stages of
28 development; two mixed use projects in the City of Carpinteria have been approved that include
29 85,000 square feet of office space and a 6,000-square-foot commercial building. Within the City of
30 Ventura, one mixed use project and a two-story office building project are currently under
31 construction, and another mixed use project has been approved. These projects would all result in
32 similar impacts, such as temporary and permanent increases in traffic, air emissions, and changes
33 in the visual landscape.
34

35 **Industrial Projects**

36 A number of industrial projects are in various stages of development within Ventura County and
37 the City of Ventura. Three projects are currently awaiting permit application resubmittal in
38 Ventura County including: a project to develop a contractor service yard on 7.7 acres of a 22 acre
39 parcel, conversion of an existing contractor's service yard into a Class II Oilfield Waste Disposal
40 Facility, and construction of a new packing and processing facility. Another project in Ventura
41 County, a 6,000 square foot industrial building, is currently undergoing application completeness
42 review. Within the City of Ventura, a 134,797 square foot warehouse and maintenance building is
43 currently under construction. These projects would all result in similar impacts as those associated
44 with residential projects and commercial and retail developments: temporary and permanent
45 increases in traffic, air emissions, and changes in the visual landscape.
46

1 **Agricultural Projects**

2 Within the cumulative study area, four agricultural projects are in various stages of development –
3 all within unincorporated Santa Barbara County. Applications have been filed for a 20,000 square
4 foot agricultural development and for a commercial horse training, breeding, and boarding facility.
5 Environmental review has not yet been completed for either of these projects. Two agricultural
6 projects have been approved: the Carpinteria Valley Farms Project, which includes a development
7 plan for buildings and structures in excess of 20,000 square feet, and the Holani Farms Horse
8 Boarding Facility, a 20,805 square foot commercial horse boarding facility.
9

10 **Public Services Projects**

11 There are two reasonably foreseeable public services projects within the cumulative study area.
12 The Summerland Community Public Safety Center would be located in unincorporated Santa
13 Barbara County and includes construction of a new fire station and associated facilities.
14 Environmental review for the project was completed in October 2012, and it is currently
15 undergoing permit compliance review. A new 320,000 square foot hospital is currently under
16 construction in the City of Ventura.
17

18 **Infrastructure Projects**

19 Infrastructure projects within the cumulative study area include bridge replacement projects, road
20 widening, interchange expansion, and road extension projects, and new wireless communication
21 facility projects. Two of these projects, the Arroyo Parida Bridge Replacement Project in
22 unincorporated Santa Barbara County and the Linden Avenue-Casitas Pass Interchanges Project in
23 the City of Carpinteria, would involve relocation of Southern California Edison (SCE)
24 subtransmission and distribution lines. In addition, a number of SCE projects are scheduled or
25 proposed to take place within the cumulative study area including: substation modification
26 projects, reconductoring an 11 mile segment of a 66-kV subtransmission line, repair or
27 replacement of retaining walls in three locations, a fiber optic cable project, and three
28 infrastructure replacement/remediation programs.
29

30 ***Substation Modification Projects***

31 SCE is planning substation modifications at the Ventura, Casitas, Carpinteria, San Miguel, and Santa
32 Clara substations. Construction of these modifications is anticipated to take place between 2014
33 and 2017. Modifications at each of the substations would take place within the existing substation
34 wall or fence would not result in an increase of the voltage rating of any of the substations. The
35 modifications may entail replacement of banks and miscellaneous equipment additions and
36 replacements. The work to be conducted at each of these substations would occur in areas with no
37 public viewpoint and would have no impact on any resource areas. Therefore, these modification
38 projects are not considered further in the cumulative impact analysis.
39

40 ***Santa Clara-Colonia 66-kV Subtransmission Line Reconductor Project***

41 The Santa Clara-Colonia 66-kV Subtransmission Line Reconductor Project would involve replacing
42 the conductors on an approximately 11 mile segment of a 66-kV subtransmission line. Construction
43 of the project is anticipated to begin in 2018.
44

1 **Carpinteria-Ventura Fiber Optic Cable Project**

2 SCE's Edison Carrier Solutions has proposed the Carpinteria-Ventura Fiber Optic Cable Project to
3 improve the reliability of the SCE communications network between Ventura and Santa Barbara.
4 The project would involve installing new fiber optic cable, primarily on existing distribution
5 facilities. In locations where existing distribution poles are not available, the cable would be placed
6 in existing or new underground conduit. The undergrounding would occur primarily within
7 existing public rights-of-way.
8

9 **Deteriorated Pole Replacement Program**

10 The Deteriorated Pole Replacement Program (DPRP) is an ongoing inspection and maintenance
11 program through which deteriorated wood poles are identified and replaced to meet safety
12 requirements. Within the cumulative study area 146 wood poles have been identified for
13 replacement. Ongoing pole replacement activities are anticipated to take place between 2013 and
14 2018.
15

16 **Transmission Line Rating and Remediation Program**

17 The Transmission Line Rating and Remediation Program (TLRR) focuses on evaluating and
18 remediating spans of SCE's transmission system in order to meet clearance criteria established by
19 the California Public Utilities Commission (CPUC). The remediation work may include relocating
20 distribution lines and street lights from under transmission lines, modifying pole head
21 configurations, tightening insulators or conductors, grading underlying areas to remediate
22 clearance concerns, modifying or replacing towers/poles, or installing intersect towers/poles.
23 Within the cumulative study area there are 14 locations that have been identified as work locations
24 under the program. The construction work at these locations is anticipated to occur between 2017
25 and 2018.
26

27 **Past Work in Project Area**

28 As discussed in Chapter 1, "Introduction," SCE conducted the following unpermitted activities on
29 Segments 1, 2, and 3A and several surrounding substations between 1999 and 2004:
30

- 31
- 32 • *Segment 1/Getty Tap*
 - 33 - Forty lattice steel towers (LSTs) and one wood H-frame structure were removed,
34 although some foundation material for the previous LSTs was not removed and remains
35 in place.
 - 36 - Thirty-seven tubular steel poles (TSPs) and 3 LSTs were constructed in line with the
37 removed structures.
 - 38 - Two circuits, each totaling approximately 47,500 feet in length, of 954 stranded
39 aluminum conductor (SAC) were installed, replacing 653 aluminum conductor steel-
40 reinforced (ACSR) conductor.
 - 41 - Two footings for TSPs, two lightweight steel (LWS) H-frames, one LWS pole, and two
42 switches at the Getty Tap location were installed, and two wood H-frames and one
43 wood pole were removed.
 - 44 • *Segment 2*
 - 45 - Twenty LSTs were removed, although some foundation material for the LSTs was not
removed and remains in place.

- 1 - Sixteen TSPs and 2 new LSTs were constructed within the alignment of the removed
2 structures.
- 3 - Two circuits, each totaling approximately 21,500 feet in length, of 954 SAC were
4 installed, replacing 653 ACSR conductor.
- 5 • *Segment 3A*
- 6 - Approximately 32 existing wood poles along Segment 3A were not replaced; the
7 condition of these poles was determined to be sufficient to support the new conductor,
8 and the only work conducted on these poles was the installation of new conductor.
- 9 - Forty-nine new LWS poles were installed to replace approximately 49 wood
10 subtransmission poles that previously supported 66 kV facilities. Work on these poles
11 included the installation of new conductor and the transfer of distribution circuits.
- 12 - With respect to the pre-existing 49 wood subtransmission poles, 34 of these wood
13 subtransmission poles were removed entirely, and 15 of the wood poles were 'topped'
14 by removing the upper portion of the pole, thus leaving shorter poles in place on which
15 16 kV distribution circuits and third-party telecommunications facilities remain.
- 16 - Approximately 19,500 feet of single-circuit 954 SAC was installed, replacing 653 ACSR
17 conductor.
- 18 - One TSP was installed at the eastern terminus of Segment 3A; this TSP replaced an
19 existing wood pole.
- 20 - Approximately five wood guy stubs with heights between 20 and 30 feet were replaced
21 with five new wood guy stubs with heights between 25 and 40 feet.
- 22

23 Substation modifications at Carpinteria Substation, Goleta Substation, Isla Vista Substation, Ortega
24 Substation, and Santa Clara Substation also occurred as part of the previous work performed in the
25 project area.

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27 **6.1.3 Resource Areas**

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29 **6.1.3.1 Aesthetics**

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31 **Scope and Geographic Extent**

32 The scope for considering cumulative impacts to aesthetics includes any project that would create
33 impacts similar to those associated with the proposed project, that is, any project that would affect
34 existing visual character or quality in the vicinity of the proposed project components. The
35 geographic extent for considering cumulative impacts to aesthetics includes all projects within 2
36 miles of the proposed project components, which is a conservative estimate of the likely maximum
37 distance from which project components would be visible, particularly considering the terrain of
38 the project area.

39

40 **Existing Cumulative Conditions**

41 The landscapes in the project component areas are characterized by chaparral-covered mountain
42 slopes, agricultural land uses, and low density residential development. The viewshed of Lake
43 Casitas and the ridgelines and other sensitive landscape features surrounding Lake Casitas are the
44 only designated scenic areas in the cumulative study area. There are no Designated State Scenic
45 Highways in the project vicinity; however, SR 150 is an Eligible State Scenic Highway.

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Cumulative Impact Analysis

Cumulative projects that are within the geographic extent for cumulative impacts related to aesthetics include residential, commercial, industrial, and infrastructure projects. However, the vast majority of projects within two miles of the project components are located within the City of Carpinteria. Neither the project components themselves nor the reasonably foreseeable development projects in this area differ substantially from surrounding land uses.

The Past Work in Project Area (E8) along Segments 1, 2, and 3A is the only cumulative project located outside of the City of Carpinteria but within the same viewshed as the proposed project. Although the Past Work in the Project Area resulted in changes in the visual character or quality that are visible to sensitive viewers in the Shepard Mesa area and motorists and bicyclists in the vicinity (Segment 3A), the proposed project does not contribute to that impact. The proposed project includes only the addition of fault return conductor, which would not result in a significant visual impact and therefore does not contribute to the existing long-term visual impact that resulted from the past work. A discussion of how the Past Work in the Project Area (E8) along Segment 3A resulted in significant long-term aesthetic impacts is included in Chapter 7.

Because the proposed project does not contribute the existing visual impact, construction of the proposed project would not result in a considerable contribution to cumulative impacts on aesthetic resources in the project area.

6.1.3.2 Agriculture and Forestry Resources

Scope and Geographic Extent

The scope for considering cumulative impacts to agricultural and forestry resources includes any project that would impact state-designated, important farmland (Prime Farmland, Unique Farmland, and/or Farmland of Statewide Importance), conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland production zones, or result in the loss of forest land. The geographic extent for cumulative impacts to agriculture is Santa Barbara and Ventura counties because cumulative impacts on important farmland are recorded at the county level. As discussed in Section 4.2, "Agriculture and Forestry Resources," the proposed project would not conflict with existing zoning for forest land, land zoned for timberland production, or result in the loss or conversion of forest land to non-forest use. Therefore, potential cumulative impacts on forestry resources are not discussed further in this section.

Existing Cumulative Conditions

In Santa Barbara and Ventura Counties, urban and suburban uses can encroach on farmland, resulting in a loss of important farmland when land with agricultural uses or designation is converted to residential, commercial, industrial, and other development. Urban encroachment on farmland can also result in indirect impacts, including restrictions on typical farm activities, such as heavy equipment operation, and reductions in the productivity of crops related to air quality impacts.

Approximately 12 percent of the total acreage of Santa Barbara County (125,112 acres) and 20 percent of the total acreage of Ventura County (119,683 acres) is classified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance (Important Farmland) (CDC 2010a, 2010b).

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2 **Cumulative Impact Analysis**

3 Although some ongoing development in Santa Barbara and Ventura Counties would result in
4 impacts on farmland and land designated for agricultural uses, this type of development tends to
5 occur adjacent to or near areas developed with urban, suburban, and other non-agricultural uses,
6 or as urban infill. The Past Work in Project Area (E8) resulted in one structure on active Unique
7 Farmland in the Shepard Mesa area. The structure is immediately adjacent to the new LWS pole within
8 the right-of-way (ROW). Therefore, the placement of the new LWS pole resulted in less than 0.001 acres
9 of long-term disturbance on Unique Farmland. The placement of new TSPs in Segments 1 and 2 resulted
10 in less than 0.007 acres of long-term disturbance to Grazing Land. Moreover, Santa Barbara and
11 Ventura Counties implement policies to address potential impacts on agricultural uses in their
12 General Plans, including policies to protect farmland and review development in rural areas that
13 could impact agricultural uses. Therefore, any impact from the cumulative projects on agricultural
14 resources within the area of cumulative effect would be less than significant.
15

16 Work in Segments 3A, 3B, and 4 of the proposed project would temporarily disturb up to 28 acres
17 of Unique Farmland and 3.7 acres of Prime Farmland. At the conclusion of construction, the
18 majority of the disturbed areas would be returned to as close to pre-construction conditions as
19 feasible, or to conditions agreed upon by the landowner and SCE. Construction and operation of the
20 project would result in the permanent conversion of approximately 12.30 acres of lands identified
21 as important farmland, which represents a loss of 0.005 percent of the Important Farmlands
22 inventory in Santa Barbara and Ventura Counties. Therefore, the proposed project would not result
23 in a considerable contribution to cumulative impacts on state-designated important farmland
24 Santa Barbara and Ventura Counties.
25

26 **6.1.3.3 Air Quality**

27
28 **Scope and Geographic Extent**

29 Projects included in the cumulative analysis for air quality impacts are limited to existing and
30 reasonably foreseeable projects within 5 miles of the proposed project components.
31

32 **Existing Cumulative Conditions**

33 Existing sources of air pollutants in the cumulative study area (Santa Barbara County and Ventura
34 counties) include commercial and industrial area sources, non-road mobile sources (e.g., off-
35 highway equipment), on-road mobile sources, and aircraft emissions. The proposed project is in an
36 area under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD)
37 and the Ventura County Air Pollution Control District (VCAPCD) and is located within the South
38 Central Coast Air Basin. The portion of the air basin where the proposed project would be located is
39 designated as nonattainment for ozone and PM₁₀ with respect to National Ambient Air Quality
40 Standards and California Ambient Air Quality Standards.
41

42 **Cumulative Impact Analysis**

43 Cumulative projects identified in Table 6-1 would contribute to cumulative air emissions. The
44 contribution of additional emissions of ozone precursors (i.e., NO_x, CO, and Reactive Organic Gases
45 [ROGs]), PM_{2.5} and PM₁₀ could result in a significant impact to air quality. However, like the
46 proposed project, cumulative projects would be required to comply with applicable VCAPCD and
47 SBCAPCD regulations, as well as with additional county-specific requirements to mitigate impacts
48 associated with construction emissions.

1 As described in Section 4.3, "Air Quality," the CPUC has opted to use the South Coast Air Quality
2 Management District (SCAQMD) Air Quality Significance Thresholds for Construction for the
3 purpose of this EIR analysis due to the absence of quantitative thresholds of significance for short-
4 term construction emissions from SBCAPCD and VCAPCD. After the implementation of VCAPCD and
5 SBCAPCD regulations (APM AQ-1 and APM AQ-2) and MM AQ-1, the proposed project would
6 nonetheless result in significant ROG, NO_x, PM_{2.5}, and PM₁₀ emissions during the first year of
7 construction. Therefore, the proposed project would result in a cumulatively considerable impact
8 in relation to air quality during the first year of construction.

9
10 During the second year of construction, ROG, NO_x, PM_{2.5}, and PM₁₀ emissions would be well below
11 SCAQMD construction threshold (Table 4.3-12). The proposed project would be consistent with
12 VCAPCD and SBCAPCD air quality plans. Therefore cumulatively considerable impacts in relation to
13 air quality would not occur during the second year of construction.

14
15 Operation of the proposed project would not differ in scope or scale from current operations and
16 maintenance activities along the 66 kV subtransmission lines or at the substations. The emissions
17 associated with current and future project operations would represent a very small fraction of the
18 regional emission inventories and would not be contribute to any cumulatively considerable
19 impacts to air quality.

20 21 **6.1.3.4 Biological Resources**

22 23 **Scope and Geographic Extent**

24 The scope for considering cumulative impacts on biological resources includes cumulative projects
25 that could have an adverse effect on special status species, U.S. Fish and Wildlife Service (USFWS)-
26 designated critical habitat, wetlands and riparian areas, and sensitive vegetation communities as
27 discussed in Section 4.4, "Biological Resources." The geographic extent for considering project-
28 related cumulative impacts on biological resources includes projects within 5-miles of proposed
29 project components because this distance encompasses a reasonable representative range for
30 populations of the sensitive species, such as nesting birds, identified in the individual impact
31 analysis for the proposed project.

32 33 **Existing Cumulative Conditions**

34 Most areas in the immediate vicinity of the proposed project are sparsely populated, with the
35 exception of the western portions of Segments 3A and 4, which pass through residential areas at
36 the edge of suburban Carpinteria. The area surrounding the project area includes various native
37 coastal, chaparral, and woodland vegetation types. Numerous wildlife species are known occur
38 within the project vicinity, including fish, reptile, amphibian, bird, and mammal species.

39 40 **Cumulative Impact Analysis**

41 The majority of the cumulative projects listed in Table 6-1 are planned to be constructed in
42 disturbed urban areas in the lower elevations on the coastal plain. Most of these projects are
43 residential or commercial/retail projects, typical of urban infill development, at lower elevations
44 on the coastal plain and are therefore less likely to impact special status plant and wildlife species.
45 Within the immediate vicinity (less than 0.5 miles) of the proposed project components, all but two
46 of the cumulative projects are other utility-related projects (e.g., installing fiber optic cables,
47 repairing retaining walls, replacing deteriorated distribution system poles) planned by SCE.

1 The Previous Work Performed in Project Area (E8) could have impacted similar biological
2 resources as the proposed project along Segments 1, 2, and 3A. The Previous Work Performed in
3 Project Area resulted in less than one acre of long-term disturbance along Segment 3A. This
4 segment does not contain high quality habitat for special status species. Much of the land along
5 Segment 1 has been historically used for grazing activities and is consistently disturbed. The access
6 road previously used for construction crosses Cañada Larga stream and does not contain a crossing
7 structure. This stream contains special status species and is designated critical habitat for Southern
8 California steelhead (*Oncorhynchus mykiss irideus*). Segment 2 is predominantly California coastal
9 live oak woodland and has more dense tree coverage than Segments 1 and 3A. Segment 2 shares a
10 ROW with and is located between two existing transmission lines, so it is assumed that the area in
11 the immediate vicinity of the Segment 2 towers was already disturbed at the time of construction
12 due to operations and maintenance activities within the ROW.

13
14 Construction of the proposed project could affect several special status plant and wildlife species.
15 The proposed project would also be required to comply with all applicable laws and regulations
16 related to special status plant and wildlife species. Moreover, the proposed project would
17 implement APMs and mitigation measures, as described in Section 4.4, "Biological Resources," to
18 ensure that impacts to special status plants and wildlife are less than significant. Due to the
19 physical distance between cumulative project construction sites, and the short-term nature of
20 construction activities, the proposed project's contribution to any cumulative impacts related to
21 special status plant and wildlife would not be cumulatively considerable.

22
23 Project construction could affect riparian habitats in Segment 4 as a result of water body crossings.
24 Cumulative projects involving waterway crossings include the Arroyo Parida Bridge Replacement
25 Project (A6) in Santa Barbara County, the Carpinteria Valley Water District Water Storage Tank
26 Project (B12) and Restoration of Carpinteria Creek (B14) in the City of Carpinteria, and SCE's
27 Previous Work Performed in Project Area (E8). However, the proposed project and all cumulative
28 projects would be required to comply with California Department of Fish and Wildlife regulations
29 and permits regarding streambed alteration. Therefore, the proposed project's contribution to any
30 cumulative impacts related to riparian habitats would not be cumulatively considerable.

31
32 Construction and operation of the Project would have less than significant impacts on special status
33 natural communities, including Southern California Black Walnut Woodland and Southern Coast
34 Live Oak Riparian Forest, after incorporation of APMs and mitigation measures as described in
35 Section 4.4, "Biological Resources." Work would comply with Ventura County and Santa Barbara
36 County tree ordinances and applicable permits. Cumulative projects would be required to comply
37 with local tree ordinances as well. Therefore, the proposed project's contribution to any cumulative
38 impacts related to special status natural communities would not be cumulatively considerable.

39
40 Project construction and operation could have direct impacts on wetlands as defined by Section
41 404 of the Clean Water Act as a result of access road construction, rehabilitation, and maintenance.
42 However the project would be required to comply with all applicable sections of the Clean Water
43 Act as well as with State and local streambed and stormwater regulations and applicable permit
44 conditions. Other projects in the cumulative scenario would also be required to comply with
45 applicable laws, regulations, and permit conditions. Therefore, the proposed project's contribution
46 to any cumulative impacts related to wetlands would not be cumulatively considerable.

47
48 Construction and operation activities may result in temporary changes in wildlife movement due to
49 construction noise and human presence. However, these impacts would be localized, temporary,
50 and less than significant. All of the cumulative projects listed in Table 6-1 would have localized

1 footprints and would also not be expected to affect species migration. For example, no new
2 highways, levees, or other major infrastructure is planned. Therefore, the proposed project's
3 contribution to any cumulative impacts related to changes in wildlife movement would not be
4 cumulatively considerable.

5
6 After implementation of APMs and mitigation measures, as described in Section 4.4, "Biological
7 Resources," construction and operation of the proposed project would not conflict with any local
8 policies or ordinances protecting biological resources, including trees. Like the proposed project,
9 cumulative projects would be expected to comply with all applicable laws, ordinances, regulations,
10 and the conditions of applicable permits. Moreover, project-related impacts associated with tree
11 trimming or removal would be localized, and would not overlap with impacts associated with any
12 cumulative project. Therefore, the proposed project's contribution to any cumulative impacts
13 related to local policies or ordinances protecting biological resources would not be cumulatively
14 considerable.

15
16 No Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local,
17 regional, or State habitat conservation plans exist for the proposed project area. Therefore, the
18 proposed project would not contribute to a cumulative impact involving conflicts with adopted
19 natural resource plans.

21 **6.1.3.5 Cultural and Paleontological Resources**

23 **Scope and Geographic Extent**

24 The scope for considering cumulative impacts on cultural and paleontological resources includes
25 projects that would potentially disturb unidentified subsurface human remains or historic,
26 archaeological, or paleontological resources through ground disturbance, as these were the type of
27 potential impacts identified for the proposed project. No identified cultural or paleontological
28 resources would be impacted by the proposed project. Therefore, the geographic extent of the
29 analysis of cumulative impacts on cultural resources is limited to construction impacts on
30 previously unidentified cultural and paleontological resources that could occur as a result of the
31 proposed project, and where the same unidentified resources could also be affected by
32 construction of other projects (i.e., within the footprint of the proposed project and within
33 approximately 100 feet of this footprint).

35 **Existing Cumulative Conditions**

36 The majority of projects in the cumulative scenario are located in or around the disturbed urban
37 areas on the coastal plain. Ground-disturbing activities, such as those that would take place as part
38 of the proposed project, could disturb unknown cultural and paleontological resources. However,
39 most of these projects are located more than 100 feet away from the proposed project footprint
40 and do not have the potential to impact the same unidentified cultural resources as the proposed
41 project. SCE's Previous Work Performed in Project Area (E8) is within the geographic extent for
42 cumulative impacts. However, no cultural resources were reported to be damaged from ground-
43 disturbance activities. There are five reasonably foreseeable SCE projects that have the potential to
44 impact the same unidentified resources as the proposed project: Santa Clara-Colonia 66 kV
45 Subtransmission Line Reconductor Project (E1), repair or replacement of an existing retaining wall
46 (E3), the DPRP (E5), the TLRR (E6), and the Carpinteria-Ventura Fiber Optic Cable Project (E7).

1 **Cumulative Impact Analysis**

2 As discussed in Section 4.5, “Cultural Resources,” the proposed project could disturb unknown
3 subsurface human remains or historic, archaeological, or paleontological resources through
4 excavation and ground disturbance. Several other projects in the cumulative scenario could take
5 place in the same location or within 100 feet of the proposed project components; there is some
6 potential that the proposed project and another project could affect the same unknown resource or
7 result in cumulatively significant impacts on unknown resources. However, it is reasonable to
8 assume that, similar to the proposed project, potential impacts on unknown cultural or
9 paleontological resources associated with other projects in the immediate vicinity, as well as with
10 other development projects in the area, would be appropriately mitigated by construction
11 monitoring and other standard mitigation measures (including recordation, avoidance, and
12 relocation), as appropriate. Numerous California laws and policies, as well as Santa Barbara and
13 Ventura County policies, are in place that require measures to avoid, reduce, or minimize impacts
14 to cultural and paleontological resources. Moreover, all of the reasonably foreseeable projects in
15 the vicinity of the proposed project are other SCE projects and would be subject to SCE’s standard
16 best management practices for dealing with unanticipated cultural or paleontological resource
17 discoveries (e.g., SCE’s Cultural Resources Unanticipated Discovery Plan). Therefore, the total
18 impact of development projects on unknown cultural resources within the cultural resources
19 cumulative study area (i.e., within 100 feet of the proposed project footprint) would not result to be
20 cumulatively considerable.

21
22 **6.1.3.6 Geology, Soils, and Mineral Resources**

23
24 **Scope and Geographic Extent**

25 The scope for considering cumulative impacts on geology, soils, and mineral resources includes
26 projects that have the potential to expose people or structures to potential substantial adverse
27 effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault,
28 strong seismic ground shaking, or seismic-related ground failure, including liquefaction; projects
29 that would result in substantial soil erosion or the loss of topsoil; projects that would be located on
30 a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed
31 project, and potentially result in an onsite or offsite landslide, lateral spreading, subsidence,
32 liquefaction, or collapse; or projects that would be located on expansive soil, creating substantial
33 risks to life or property. The geographic extent for considering cumulative impacts to geology, soils,
34 and minerals is a 0.5-mile radius from the footprint of the proposed project components because
35 geologic hazards are generally dependent on localized geologic and soil conditions. As discussed in
36 Section 4.6, “Geology, Soil, and Mineral Resources,” the proposed project would have no impact on
37 mineral resources. Therefore, potential cumulative impacts on mineral resources are not discussed
38 further in this section.

39
40 **Existing Cumulative Conditions**

41 The proposed project components, and projects in the cumulative scenario that are within the
42 geographic extent for considering cumulative impacts related to geology and soils, are located
43 within a seismically active area in close proximity to a number of active and potentially active
44 faults. Areas in the cumulative study area for geology and soil resources range from low-lying
45 areas, with potential for liquefaction, to areas with rugged topography, steep slopes, and unstable
46 bedrock with potential for soil erosion and landslides. In addition some of the soils in the area have
47 a very high potential for erosion.

48

1 Projects within the geographic extent for considering cumulative impacts related to geology and
2 soils include a project that would involve the eradication of noxious weeds along Rincon Creek and
3 several other planned SCE projects including: the Santa Clara-Colonia 66-kV Subtransmission Line
4 Reconductor Project (E1), repair or replacement of an existing retaining wall (E2 through E4), the
5 DPRP (E5), the TLRR (E6), the Carpinteria-Ventura Fiber Optic Cable Project, and SCE's Past Work
6 in the Project Area (E8).

8 **Cumulative Impact Analysis**

9 As discussed in Section 4.6, "Geology, Soils, and Mineral Resources," the proposed project
10 component areas are located in a seismically active region and active faults in the area are capable
11 of causing damage to proposed project structures. In addition, there is the potential for soil
12 instability-related impacts such as soil erosion, landslides, and liquefaction. The proposed project
13 would result in the replacement of older structures that are more susceptible to seismic events and
14 relocating or removing subtransmission structures that are in areas susceptible to landslides. The
15 areas of the proposed project most susceptible to landslides are the higher elevation areas, which
16 tend to be sparsely populated. Areas with potential for liquefaction potential would be avoided or
17 project components would be designed to minimize the potential for liquefaction and incorporate
18 ground improvements in liquefiable zones. Furthermore, implementation of APMs and mitigation
19 measures, implementation of erosion and sedimentation control measures required in the
20 Stormwater Pollution Prevention Plan (SWPPP), and the application of appropriate and required
21 engineering design, including compliance with current building codes and regulations as required
22 by local jurisdictions, would reduce any potential impacts related to geology and soils to a less than
23 significant level.

24
25 Similar to the proposed project, any new development in the region would also be required to be
26 constructed in a seismically sound manner, in compliance with the California Building Code and
27 applicable local regulations. Projects that would result in more than one acre of ground disturbance
28 would also be required prepare a SWPPP as part of complying with the National Pollution
29 Discharge Elimination System Construction Stormwater General Permit, which would reduce the
30 potential for soil erosion and loss of topsoil. The cumulative projects would include appropriate
31 geotechnical engineering, design measures, and BMPs that would reduce any potential impacts
32 related to geology and soils to a less than significant level.

33
34 Therefore, any cumulative impact related to geology and soils would be less than significant, and
35 the proposed project would not result in a considerable contribution to cumulative impacts related
36 to geology and soils.

38 **6.1.3.7 Greenhouse Gas Emissions**

40 **Scope and Geographic Extent**

41 The scope for considering cumulative impacts related to emissions of greenhouse gases (GHGs)
42 includes projects that have the potential to generate GHG emissions during construction or
43 operation. Because impacts related to GHG emissions are inherently global in nature (though they
44 tend to be regulated on a regional or state level), the geographic extent for considering cumulative
45 impacts related to GHGs is likewise global.

1 **Existing Cumulative Conditions**

2 Regional and global development patterns continue to rely on methods and practices that
3 contribute large volumes of GHGs to the atmosphere, and impacts related to GHGs have widespread
4 and potentially harmful consequences. The increase in GHGs in the atmosphere, caused in large
5 part by human activity, is now considered one of the key causes of global climate change. Current
6 scientific research indicates that potential effects of climate change include variations in
7 temperature and precipitation, sea-level rise, impacts on biodiversity and habitat, impacts on
8 agriculture and forestry, and human health and social impacts (CNRA 2009). As described in the
9 state's Climate Change Scoping Plan of 2008 (CARB 2008), GHG sources in the state collectively
10 result in emissions that are higher than the targets established by Assembly Bill 32, which indicates
11 that GHG emissions in the state continue to contribute to a total significant, state-wide cumulative
12 impact.

13
14 All projects included in the cumulative scenario would generate GHGs during construction
15 (equipment emissions) and operations (increased traffic trips to new development).

16
17 **Cumulative Impact Analysis**

18 The CEQA Guidelines include provisions for assessing the cumulative impacts of projects with GHG
19 emissions. According to the guidelines, the lead agency “may determine that a project’s incremental
20 contribution to a cumulative effect is not cumulatively considerable if the project will comply with the
21 requirements in a previously approved plan or mitigation program (including, but not limited to, ... plans
22 or regulations for the reduction of GHG emissions) which provides specific requirements that will avoid
23 or substantially lessen the cumulative problem” (Section 15064[h][3]). According to this section, if an
24 adopted plan or program adequately addresses cumulative GHG emissions and would apply to proposed
25 development, the determination may be made that the development would not result in a cumulatively
26 considerable impact, as long as the plan or mitigation program being relied upon imposes requirements
27 that adequately address cumulative GHG emissions. In addition, in order to appropriately determine and
28 mitigate GHG impacts, the plan or mitigation program must provide specific requirements that will avoid
29 or substantially lessen the cumulative impact, must be specified in law or adopted through a public
30 review process, and must be enforceable.

31
32 The proposed project would generate direct emissions of GHGs from equipment/vehicle usage
33 during construction and operation and from potential sulfur hexafluoride (SF₆) leakage from
34 electrical equipment. The Santa Barbara County Air Pollution Control District has not established
35 significance criteria for GHG emissions (SBCAPCD 2011). The Ventura County Air Pollution Control
36 District (VCAPCD) is considering a tiered approach to assessing GHG emissions with the main
37 components involving consistency with a locally adopted GHG reduction plan, followed by a bright-
38 line threshold for some projects (VCAPCD 2011). Given that the VCAPCD has not yet formally
39 adopted GHG emissions thresholds, they are currently deferring to the interim significance
40 thresholds established by the South Coast Air Quality Management District (the adjacent air quality
41 jurisdiction). The net GHG emission change associated with construction of the proposed project
42 would be less than the SCAQMD interim GHG significance threshold of 10,000 metric tons of carbon
43 dioxide equivalency (CO₂e) per year. It is estimated that the proposed project would result in an
44 increase of 8,458 metric tons of CO₂e during construction and that operational emissions would
45 remain unchanged, as discussed in Section 4.7, “Greenhouse Gas Emissions.”

46
47 The total impact of development projects related to GHGs within cumulative study area would be
48 significant. However, the proposed project would include APMs, air quality and local agency permit

1 conditions, and mitigation measures that would address and reduce the generation of GHGs during
2 construction, and project construction emissions would be well below SCAQMD's interim GHG
3 significance threshold of 10,000 metric tons of CO₂e per year. In addition, project operation would
4 not result in any changes to GHG emissions from current levels. Although the overall cumulative
5 context for GHG emissions in the state indicates a significant total cumulative impact, the proposed
6 project would not result in a considerable contribution to cumulative impacts related to GHGs.
7

8 **6.1.3.8 Hazards and Hazardous Materials**

9 **Scope and Geographic Extent**

11 The scope for considering cumulative impacts related to hazards and hazardous materials includes
12 any project that would have the potential to cause an accidental release to the public or
13 environment during transport, use, or disposal of hazardous materials, any project that would
14 potentially expose sensitive receptors to an accidental release of hazardous materials, and any
15 project that could expose people or structures to a significant risk of loss, injury, or death involving
16 wildland fires. The geographic extent for considering project-related cumulative impacts related to
17 hazards and hazardous materials would be projects within 5 miles of the proposed project
18 components because this distance captures most of the area of the sub-watersheds that the project
19 crosses (including all of the downgradient drainages that could be impacted by the proposed
20 project) and includes areas subject to wildland fires.
21

22 The proposed project would not be constructed or operated on or within 1,000 feet of any site
23 listed as hazardous materials site pursuant to State of California Government Code Section 65962.5
24 (i.e., the "Cortese List"), within an airport land use plan area, or within 2 miles of a public airport,
25 public use airport, or private airstrip. The proposed project would also not interfere with an
26 adopted emergency response plan or emergency evacuation plan. Therefore, the proposed project
27 would not contribute to any cumulative impacts related to hazardous materials sites, safety
28 hazards related to people residing and/or working in or near airports, or interfere with an adopted
29 emergency response or evacuation plan.
30

31 **Existing Cumulative Conditions**

32 Construction activities associated with the proposed project would involve transport, use, and
33 disposal of hazardous materials. This would include the use of hazardous materials typically used
34 by construction vehicles and heavy equipment (e.g., gasoline, diesel fuel, transmission fluid, brake
35 fluid, hydraulic fluid, solvents, motor oils, and lubricating grease). Most of the projects in the
36 cumulative scenario would also require the use of vehicle and heavy machinery and would likewise
37 require the use of hazardous materials. In addition to these typical hazardous materials, the
38 proposed project would also require the use of other hazardous materials including: welding
39 materials, propane, canned spray paint, paint thinner, battery acid, and insect repellent, albeit on a
40 temporary basis during construction. All of the projects in the cumulative scenario in the
41 immediate vicinity of the proposed project components are other SCE projects that are of a similar
42 type as the proposed project (e.g., subtransmission line reconductoring, installing a new fiber optic
43 cable, replacing deteriorated wood poles, modifying or replacing structures, relocating distribution
44 lines, etc.), and may likewise require the use of similar additional hazardous materials on a
45 temporary basis. SCE's Previous Work Performed in Project Area (E8) is within the geographic
46 extent for cumulative impacts. However, impacts from hazardous materials were reported.
47

1 There are four schools within 0.25 miles of proposed project components, all within the City of
2 Carpinteria. However, only three of the schools have are within 0.25 miles of other projects in the
3 cumulative scenario (in addition to the proposed project). Carpinteria High School is adjacent to
4 the Carpinteria Substation and Segment 4 of the proposed project and is also less than 0.25 miles
5 from the Carpinteria-Ventura Fiber Optic Cable Project. Canalino Elementary School is 0.22 miles
6 south of Segment 3A and less than 0.25 miles from the Carpinteria-Ventura Fiber Optic Cable
7 Project and the Linden Ave – Casitas Pass Interchanges Project. Howard Carden School is 0.03 miles
8 south of Segment 3A and less than less than 0.25 miles south of the Carpinteria-Ventura Fiber Optic
9 Cable Project.

10
11 Much of the cumulative study area overlaps with areas that have been identified by CAL FIRE as
12 Very High Fire Hazard Severity Zones (see Figure 4.8-1) due to flammable native vegetation, dry
13 weather conditions, and high winds. However, most of the projects in the cumulative scenario are
14 planned at lower elevations on the coastal plain in disturbed urban areas and would be unlikely to
15 pose a significant risk of igniting vegetation.

16 **Cumulative Impact Analysis**

17
18 As discussed in Section 4.8, “Hazards and Hazardous Materials,” project construction would result
19 in less than significant impacts associated with the transport, use, disposal, or foreseeable upset of,
20 or accidents involving hazardous materials during construction. The applicant would comply with
21 all applicable laws and regulations regarding routine transport, use, or disposal of hazardous
22 materials. The applicant would also implement APMs, plans, and measures addressing safety and
23 hazardous materials. Although there is potential for an accidental release of hazardous materials
24 from the proposed project and other projects in the cumulative scenario to contribute to a
25 cumulatively considerable impact related to the accidental release of hazardous materials into the
26 environment, especially if the hazardous materials were transported offsite in water or air, projects
27 in the cumulative scenario would also be required to implement BMPs and adhere to all applicable
28 laws and regulations associated with hazardous materials. Therefore, the proposed project’s
29 potential to contribute to cumulative impacts related to hazardous materials would be less than
30 considerable.

31
32 Three schools are within 0.25 miles of the proposed project and other projects in the cumulative
33 scenario. Construction of the proposed project would involve the limited transport of hazardous
34 liquids (e.g., gasoline, solvents, and lubricating fluids), which are commonly used during
35 construction activities associated with commercial, residential, and industrial projects. Compliance
36 with federal, state, and local regulations, as well as implementation of APM GEN-1, which requires
37 that all proposed project workers receive training that includes safety elements and instructions
38 for dealing with hazardous materials, would ensure that impacts related to hazardous materials
39 and schools are less than significant. Other projects in the cumulative scenario would also be
40 required to comply with applicable federal, state, and local regulations related to the transport and
41 use of hazardous materials. Therefore, the proposed project’s contribution to cumulative impacts
42 related to hazardous materials and schools would be less than considerable.

43
44 The majority of the proposed project components are located in areas identified by CAL FIRE as
45 Very High Fire Hazard Severity Zones (CAL FIRE 2007a, 2007b, 2008, 2010). Construction,
46 operation, and maintenance activities associated with the proposed project would increase fire risk
47 during refueling, vehicle and equipment use, welding, vegetation clearing, and other activities.
48 However, the project would be required to comply with applicable laws and regulations regarding
49 fire safety such as California Public Resources Code Sections 4291 through 4299, which regulate

1 vegetation management, and CPUC General Orders 95 and 165 related to subtransmission line
2 construction. The applicant would also be required to develop a Fire Control and Emergency
3 Response Plan, in coordination with local fire departments, to identify fire prevention measures
4 and response and communication protocols. Although most of the projects in the cumulative
5 scenario are planned in disturbed urban areas that are less susceptible to fire, a number of
6 additional SCE projects are planned in the immediate vicinity of the proposed project that pose a
7 similar risk of wildland fire. However, these projects would also be required to comply with
8 applicable federal, state, and local laws related to fire prevention, design features, and operational
9 measures. Impacts related to fire would be addressed by the proposed project and other projects in
10 the cumulative scenario on a project-specific basis, and the overall cumulative impact would not be
11 significant. Therefore, the proposed project's contribution to cumulative impacts related to fire
12 hazards would be less than considerable.

14 **6.1.3.9 Hydrology and Water Quality**

16 **Scope and Geographic Extent**

17 The scope for considering cumulative impacts related to hydrology and water quality is any project
18 that could violate water quality standards, impact groundwater supplies, alter existing drainage
19 patterns in a manner that would result in substantial erosion or siltation or result in flooding,
20 impede or redirect flood flows or otherwise contribute to a risk of loss, injury, or death involving
21 water-related hazards. The geographic extent for considering project-related cumulative impacts
22 on hydrology and water quality includes projects within 5-miles of proposed project components
23 because this distance encompasses the majority of the areas of the sub-watersheds that the project
24 crosses.

26 **Existing Cumulative Conditions**

27 The regional watersheds in the cumulative study area include coastal creeks associated with
28 perennial springs, seeps, and stormwater runoff. Major waterways in the cumulative project area
29 include Franklin Creek, Carpinteria Creek, Rincon Creek and the Ventura River. Surface water
30 quality in the cumulative project area is affected by agriculture, urban runoff, and land
31 development. Federal Emergency Management Agency-designated Flood Hazard Zones are present
32 throughout the proposed project region.

34 The reasonably foreseeable projects included in the cumulative scenario (Table 6-1) would involve
35 construction projects that would result in increased impervious surfaces, excavation and grading
36 activities, and construction of buildings, homes, and other structures which could affect hydrology
37 and water quality in the cumulative study area.

39 **Cumulative Impact Analysis**

40 As discussed in Section 4.9, "Hydrology and Water Quality," impacts on hydrology and water
41 quality would be less than significant after application of APMS, and compliance with National
42 Pollutant Discharge Elimination System permitting requirements, Clean Water Act permitting
43 requirements, California Fish and Game Code Section 1600 requirements, and applicable local
44 regulations such as flood control ordinances and grading permits. Activities related to cumulative
45 projects would likewise be less than significant, because the project developers would be required
46 to implement similar measures; therefore, the project's potential impacts on hydrology and water
47 resources would not be cumulatively considerable.

1 **6.1.3.10 Land Use and Planning**
2

3 As discussed in Section 4.10, "Land Use and Planning," the proposed project would not physically
4 divide an established community, conflict with any applicable land use plan, policy, or regulation of
5 an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an
6 environmental effect, or conflict with any applicable Habitat Conservation Plan or Natural
7 Community Conservation Plan. Given that the proposed project's impact on this resource area
8 would be minor at most, the proposed project would not result in a cumulatively considerable
9 impact related to land use and planning.

10
11 **6.1.3.11 Noise**
12

13 **Scope and Geographic Extent**

14 The scope for considering cumulative noise impacts includes any project that would result in an
15 increase in ambient daytime noise levels. The geographic extent for considering cumulative noise
16 impacts is any project within 0.5 miles of the project component areas, because any project
17 operating within the noise standards established by the applicable local jurisdictions at this
18 distance would not contribute to increases in ambient noise levels at the nearest sensitive
19 receptors to the proposed project component areas.
20

21 **Existing Cumulative Conditions**

22 The ambient noise survey conducted by the applicant at several locations of the proposed project
23 components, including three locations along Segment 3B, two locations along Segment 4, one at the
24 Santa Clara Substation, one at the Casitas Substation, and one at the Carpinteria Substation,
25 indicated ambient noise levels between 38 and 64 dBA L_{eq} (ARCADIS 2012), as discussed in Section
26 4.11, "Noise."
27

28 The only other projects located within the geographic extent for considering cumulative noise
29 impacts are other SCE projects. It is not anticipated that work on any of the SCE projects in the
30 cumulative scenario will take place at the same time and within 0.5 miles of work being conducted
31 on the proposed project.
32

33 **Cumulative Impact Analysis**

34 As discussed in Section 4.11, "Noise," the proposed project could result in short-term increases in
35 noise levels during construction. Implementation of APMs and appropriate mitigation would
36 ensure that these impacts would be less than significant.
37

38 Other projects within the cumulative study area would also contribute to increases in noise levels
39 during their construction periods, which may overlap; such increases would take place in
40 compliance with policies and regulations of applicable local jurisdictions for noise from such
41 sources. Because the contribution of the proposed project to ambient noise levels at the nearest
42 sensitive receptor would be less than significant, and because all such noise impacts from other
43 projects within the cumulative analysis area would be required to comply with policies and
44 regulations of applicable local jurisdictions, the proposed project would not result in a
45 cumulatively considerable impact in relation to noise.
46
47

1 **6.1.3.12 Population and Housing**

2
3 As discussed in Section 4.12, "Population and Housing," although some construction workers may
4 travel to the region during the construction period, the proposed project would not induce
5 population growth in the area, either directly or indirectly. It would also not displace any existing
6 housing or people, necessitating the construction of replacement housing elsewhere, and it would
7 not disrupt the balance between employment opportunities and available housing in the area.
8 Given that the proposed project's impact on this resource area would be temporarily and negligible
9 at most, the proposed project would not result in a considerable contribution to cumulative
10 impacts related to population and housing.

11
12 **6.1.3.13 Public Services and Utilities**

13
14 As discussed in Section 4.13, "Public Services and Utilities," the proposed project is not expected to
15 result in additional use of public services in local jurisdictions that would not result in substantial
16 adverse physical impacts associated with provision of new or physically altered public service
17 facilities. The proposed project would not result in the need for new or physically altered public
18 service facilities in order to maintain acceptable service ratios, response times, or other
19 performance objectives for any of the public services. Given that the proposed project's impact on
20 this resource area would be minor at most, the proposed project would not result in a considerable
21 contribution to cumulative impacts related to public services and utilities.

22
23 **6.1.3.14 Recreation**

24
25 As discussed in Section 4.14, "Recreation," the applicant would use a local work force to construct
26 the proposed project. In the event that a non-local contractor is hired for construction of the
27 proposed project, it is possible that up to 105 workers would temporarily relocate to the proposed
28 project area for the duration of construction. The relocated workers would have a temporary
29 negligible impact on the use of existing recreational facilities during construction. Therefore, the
30 proposed project would not result in a considerable contribution to cumulative impacts related to
31 recreation resources.

32
33 **6.1.1.15 Transportation and Traffic**

34
35 **Scope and Geographic Extent**

36 The scope for considering cumulative impacts related to traffic and transportation includes any
37 project that would, along with the proposed project, conflict with an applicable plan, ordinance, or
38 policy establishing measures for the performance of the circulation system, conflict with an
39 applicable congestion management program, result in change in air traffic patterns, substantially
40 increase hazards due to design features or incompatible uses, result in inadequate emergency
41 access, or conflict with adopted policies, plans, or programs, regarding public transit, bicycle, or
42 pedestrian facilities, or otherwise decrease the performance or safety of such facilities.. Therefore,
43 the geographic and temporal extent for considering cumulative impacts related to traffic and
44 transportation includes all regional and local roadways that may be used to access the proposed
45 project or that could otherwise be impacted by the proposed project during construction.

1 **Existing Cumulative Conditions**

2 The operational efficiency of traffic is typically measured by level of service (LOS), a traffic
3 performance metric established by the Transportation Research Board's Highway Capacity Manual.
4 LOS is based on volume-to-capacity ratio, which compares roadway capacity to level of traffic
5 during peak hours. Roadways and intersections that are at or near capacity experience greater
6 congestion and corresponding traffic delay. The highest ranked roadways are designated "LOS A,"
7 representing free-flowing traffic, and the lowest ranked roadways are designated "LOS F,"
8 representing extreme congestion. The roadways that may be used during construction and
9 operation of the proposed project operate at LOS A through LOS D during the AM and PM peak
10 hours, depending on the particular segment of roadway and direction of travel (see Table 4.15-4)
11 (SBCAG 2009). Most of the intersections that may be used during construction and operation of the
12 proposed project operate between LOS A and LOS C, although the US-101 northbound off-ram to
13 Casitas Pass Road operates at LOS F during the AM peak (see Table 4.15-5) (Fehr and Peers
14 Transportation Consultants 2007; City of Ventura 2005).

15
16 There are three public airports within the vicinity of the proposed project and one private airport
17 located in Santa Paula east of the Santa Clara Substation. Helicopters would be used during
18 construction of the proposed project, but helicopter fueling and landing areas would be limited to
19 access and spur road locations and 14 helicopter landing areas along Segments 1, 2, and 4.

20
21 **Cumulative Impact Analysis**

22 Traffic and transportation related impacts are inherently cumulative in nature because impacts to
23 the operational efficiency, or structural integrity, of the circulation system result from vehicles
24 originating from a variety of sources. Although all of the projects in the cumulative scenario have
25 potential to add vehicle trips to the same segments of roads and/or intersections that may be
26 affected by the proposed project, it is impossible to quantitatively assess whether the projects
27 would result in a cumulatively considerable impact without additional data (e.g., where vehicle
28 trips originate from, how many vehicle trips are needed to support a particular project, when the
29 vehicle trips occur). To assist in determining whether traffic resulting from a proposed project
30 would result in a significant impact related to traffic and transportation, many jurisdictions
31 develop significance thresholds. Significance thresholds may be based on a project's potential to:
32 increase the volume-to-capacity of a roadway or intersection by a set amount, result in a change in
33 the LOS rating of a roadway or intersection, create a need for roadway improvements, or add
34 average daily trips to a roadway where the Estimated Future Volume exceeds a set policy capacity.
35 Projects that exceed a significance threshold may be required to mitigate the increased traffic as a
36 condition of receiving discretionary approval. Managing increased traffic on a project-by-project
37 basis reduces the potential for an individual project to result in a cumulatively considerable impact
38 related to traffic and transportation.

39
40 As discussed in Section 4.15, "Traffic and Transportation," the proposed project would not conflict
41 with the City of Carpinteria Environmental Review Guidelines, the City of Ventura General Plan, the
42 Santa Barbara County Comprehensive Plan, the Santa Barbara County Environmental Thresholds
43 and Guidelines Manual, or the Ventura County General Plan. The City of Carpinteria General Plan
44 states that no project shall contribute five or more peak hour trips to an intersection operating at
45 an estimated future LOS F, and the project plans to use US-101 northbound off-ram to Casitas Pass
46 Road intersection, which operates at LOS F during the AM peak. However, implementation of the
47 traffic control plan (MM TT-1) and Commuter Plan (MM TT-2) would ensure that AM peak hour use
48 of the US-101 northbound off-ramp to Casitas Pass Road intersection is avoided. Therefore the

1 proposed project would not conflict with an applicable plan, ordinance, or policy establishing
2 measures of effectiveness for the performance of the circulation system.

3
4 Like the proposed project, other projects in the cumulative scenario would be required to comply
5 with all applicable plans, ordinances, and policies that establish measures of effectiveness for the
6 performance of the circulation system. Therefore, any impacts under this criterion resulting from
7 the proposed project and other projects in the cumulative scenario would be less than significant,
8 and increased traffic resulting from the proposed project would be less than cumulatively
9 considerable.

10
11 The proposed project would use helicopters for construction work associated with transportation
12 of construction works, delivery of equipment and materials to structure sites, structure placement,
13 hardware installation, conductor and telecommunications stringing operations, and installation of
14 marker balls. Helicopter operations would be conducted in accordance with applicable FAA
15 regulations and OSHA requirements. Helicopters would only be used on a temporary basis during
16 construction. The only projects in the cumulative scenario that are likely to require the use of
17 helicopters are other SCE projects, such as the Carpinteria-Ventura Fiber Optic Cable Project and
18 the Santa Clara-Colonia 66-kV Subtransmission Line Reconductor Project. Helicopter use for these
19 projects is not expected to overlap with helicopter use for the proposed project. Therefore, the
20 project would not result in cumulative impacts to air traffic patterns, and the project's contribution
21 to changes in air traffic patterns would be less than cumulatively considerable.

22 23 **6.2 Growth-inducing Impacts**

24
25 A project could induce growth if it results in additional development, such as an increase in
26 population, employment and/or housing above and beyond what is already assumed will occur in
27 local and regional land use plans or in projections made by regional planning authorities,
28 irrespective of the proposed project. Under CEQA (Section 15126.2[d]), a project would be growth
29 inducing if it:

- 30
- 31 • Directly or indirectly fosters economic or population growth or the construction of
32 additional housing;
 - 33 • Taxes community facilities to the extent that the construction of new facilities would be
34 necessary;
 - 35 • Removes obstacles to population growth; or
 - 36 • Encourages or facilitates other activities that cause significant environmental effects.
- 37

38 Typical growth-inducing factors might include the extension of urban services or transportation
39 infrastructure to a previously unserved or under-served area or the removal of major barriers to
40 development. This section evaluates the proposed project's potential to create such growth
41 inducements. Growth inducement can be positive or negative depending on the resulting effects
42 and the development objectives of the planning authorities in the proposed project area. Negative
43 impacts associated with growth inducement would occur only where growth associated with the
44 proposed project would result in significant/adverse environmental impacts.

45
46 The proposed project would not result in population growth through direct or indirect
47 employment of workers needed to construct and operate the facilities. Construction labor demands
48 would be met by the applicant's existing employees or by hiring a small number of specialized

1 electrical transmission contractors. The small number of positions required during the
2 construction phase would not directly or indirectly induce any population growth in the area. O&M
3 activities would be carried out by the applicant's existing employees and would not require any
4 additional hiring of operation personnel. Except for routine maintenance, the proposed project
5 infrastructure would be unmanned during operation. Therefore, neither construction nor
6 operation of the proposed project would directly or indirectly induce population growth in the
7 area.
8

9 The local communities in the vicinity of the proposed project have adequate infrastructure and
10 services to meet the needs of temporary workers, including a number of hotels and motels (City of
11 Carpinteria 2013b; Ventura Visitors and Convention Bureau 2013). According to the 2010 Census,
12 the City of Ventura had a rental vacancy rate of 5.5 percent, which indicates an adequate supply of
13 rental housing in Ventura (City of Ventura 2013). The rental vacancy rate in the City of Carpinteria
14 was 12.3 percent as of June, 2012, also suggesting that there is an adequate supply of rental
15 housing in Carpinteria (Sperling's BestPlaces 2013). In addition, the proposed project would not
16 result in or require construction of any new or upgraded community facilities, would not build
17 public roads that would provide new access to undeveloped or underdeveloped areas, and would
18 not extend public services to new areas. The applicant's operational staff levels would remain the
19 same as required for current O&M activities, and operation of the proposed project would not
20 create long-term demands for emergency response services, schools, drinking water, parks,
21 libraries, hospitals, or solid waste and wastewater facilities that could not be met by existing
22 services and facilities (see Section 4.13, "Public Services and Utilities"). Therefore, construction and
23 operation of the proposed Project would not tax community facilities to the extent that the
24 construction of new facilities would be necessary.
25

26 The purpose of the proposed project is to ensure the availability of safe and reliable electric service
27 to meet customer demand in the Electrical Needs Area (ENA) during emergency conditions. The
28 proposed project would not provide new electrical service that might induce economic or
29 population growth and has not been designed to provide new electrical service to areas that are
30 currently unserved or under-served. Electrical demand is not anticipated to exceed the current
31 capacity under normal operating conditions in the ENA within the current 10-year planning period.
32 Growth in Santa Barbara County, Ventura County, and local communities is planned and regulated
33 by applicable local general plans and zoning ordinances. The provision of electricity is generally not
34 considered an obstacle to growth, and the availability of electrical capacity by itself does not
35 normally encourage growth. Other factors such as economic conditions, land and water supply
36 availability, and local planning policies have a more direct effect on growth. Therefore, the
37 proposed project would not remove obstacles to population growth.
38

39 The proposed project would reduce the risk of prolonged electrical outages during emergency
40 conditions. It would not encourage population growth or new residential, commercial, industrial,
41 or agricultural construction. Therefore, the proposed project would not encourage or facilitate
42 other activities that could significantly affect the environment.
43

44 The proposed project would not result in increases in employment, housing, or demands for
45 community facilities and services nor result in the removal of existing constraints to growth or the
46 creation of factors that encourage or facilitate development that would not otherwise have
47 occurred. Therefore, implementation of the proposed project would not result in any growth-
48 inducing impacts.
49

6.3 Significant and Unavoidable Adverse Impacts

As further discussed in Section 4.3, “Air Quality,” the proposed project would result in ROG, NO_x, PM₁₀, and PM_{2.5} emissions during the first year of construction that would exceed the applicable construction emission thresholds. Impacts on air quality standards would be significant and unavoidable during the first year of construction after the implementation of all feasible mitigation. Additionally, the first year of construction would result in increased ROG, NO_x, and PM₁₀ emissions in SBCAPCD, which is designated as nonattainment for NO_x, ROG, and PM₁₀ with respect to CAAQS, and would be cumulatively considerable after the implementation of all feasible mitigation.

As discussed in Section 6.1.3.3, the first year of construction would result in ROG, NO_x, PM₁₀, and PM_{2.5} during the first year of construction that would exceed the applicable construction emission thresholds and would significantly contribute to a cumulative impact on air quality after the implementation of all feasible mitigation.

CEQA Guidelines Section 15093 allows the decision-making agency to determine if the benefits of a project may outweigh its unavoidable adverse environmental impacts. The California Public Utilities Commission may prepare a Statement of Overriding Considerations to approve a project with unavoidable adverse impacts if it sets forth the specific reasons for making such a judgment.

6.4 Significant and Irreversible Environmental Changes

CEQA Guidelines (Section 15126.2[c]) require that an EIR identify significant irreversible environmental changes that would be caused by the proposed project. These changes may include, for example, uses of nonrenewable resources, provision of access to previously inaccessible areas, or accidents that could change the environment in the long term. Significant irreversible changes to and irretrievable commitments of resources could occur from construction and operation of the proposed project as a result of energy and materials consumption, damage from fire, land disturbance (and associated habitat loss for sensitive biological resources), and damage to or the loss of cultural or paleontological resources.

Construction of the proposed project would require a permanent commitment of natural resources from the direct consumption of fossil fuels, construction materials, and energy required for the production of materials as well as the manufacture of new components that largely cannot be recycled at the end of the project’s useful lifetime (see Chapter 2, *Project Description*). As discussed in Section 4.2, *Agriculture and Forestry Resources*, construction of the proposed project would result in the permanent conversion of lands identified as important farmland. During construction and operation there is also the risk of impacts on undiscovered cultural and/or paleontological resources. The proposed projects would also result in irreversible impacts on air quality due to emissions of NO_x, ROG, and other pollutants and greenhouse gases during construction.

Accidents, such as the release of hazardous materials, can trigger irreversible environmental damage. As discussed in Section 4.8, *Hazards and Hazardous Materials*, construction and operation of the proposed project would involve the use of small quantities of hazardous materials such as gasoline, diesel fuel, transmission fluid, brake fluid, hydraulic fluid, solvents, motor oils, and lubricating grease. An accidental spill of any of these substances could impact water quality, biological resources, and could pose a hazard to people if a large spill were to occur. However, given the small volumes of these materials and mandatory compliance with applicable regulations (as described in Section 4.8) aimed at preventing spills, or reducing the severity of a spill should it occur, accidents resulting in significant environmental or health effects are unlikely.