

1 **4.15 Transportation and Traffic**

2
3 This section describes the environmental and regulatory settings and discusses impacts that may result
4 from the construction, operation, and maintenance of the proposed Valley–Ivyglen 115-kilovolt (kV)
5 Subtransmission Line Project (proposed Valley–Ivyglen Project) and the proposed Alberhill System
6 Project (proposed Alberhill Project) with respect to transportation and traffic. A letter from the California
7 Department of Transportation (Caltrans), Division of Aeronautics, was also received during scoping that
8 requested California Environmental Quality Act (CEQA) evaluation for the proposed Alberhill Project
9 address impacts associated with Skylark Field Airport (Hesnard 2010). This comment was taken into
10 consideration in preparing this section.

11 **4.15.1 Environmental Setting**

12 **4.15.1.1 Existing Roadway Network**

13
14 The roadway network in the proposed project area is composed of interstate highways, state highways,
15 and local roads within unincorporated Riverside County and the cities of Lake Elsinore, Wildomar,
16 Perris, and Menifee. Interstate 10 (San Bernardino Freeway), Interstate 15 (I-15, Corona Freeway), and
17 State Route 74 (SR-74, Ortega Highway) are primary connections between Riverside County and Los
18 Angeles and Orange Counties. Interstate 215 (I-215, Escondido Freeway) provides an eastern bypass to
19 areas northeast of I-15.

20
21 Southern California Edison (SCE, or the applicant) would use roadways in the City of Corona as part of
22 the proposed Alberhill Project if SCE obtains fill material from Corona Rock and Asphalt (Corona
23 Quarry) for construction of the proposed Alberhill Substation as described for Import Soil Option 2
24 (Section 2.4.4.2, “Concrete Use”). Corona Rock and Asphalt is located on Sherborn Street. SCE would
25 also use roads in unincorporated Orange County and in the City of Orange to install three new
26 microwave dish antennas on existing microwave towers in unincorporated Orange County at the Santiago
27 Peak Communications Site. The number of vehicle trips on Indian Truck Trail south of Santiago Canyon
28 Road or City of Orange streets near Serrano Substation required for the installation of three dish
29 antennas, however, would be negligible, and the proposed 500-kV and 115-kV Alberhill Project
30 components do not require the use of these roadway segments. Therefore, impacts on roadways in
31 Orange County and the City of Orange are not evaluated further in this section.

32
33 Figure 3-1 in Appendix J-1 and Figure 3-1 in Appendix J-2 depict highways, arterials, and major
34 roadways in the proposed project area.

35 **Highways**

36
37 A number of major highways serve the project area, including I-15, I-215, and SR-74. Table 4.15-1
38 provides additional information on these highways.

Table 4.15-1 Highways in Vicinity of Proposed Project

Highway	Description	Adjacent Project Component
Interstate 15	<ul style="list-style-type: none"> • Traverses area in north-south direction on east side of Lake Elsinore • Connects Riverside County to San Diego County • Three lanes in each direction 	<ul style="list-style-type: none"> • 115-kV Segments ASP 1.5, ASP2, ASP3, ASP4, VIG 4, VIG 5, VIG6, VIG7, and VIG8 would parallel I-15. • I-15 would be crossed by 115-kV Segments ASP2, ASP3, ASP5, VIG3, VIG5, and VIG7. • 115-kV Segment VIG8 would be installed underground along Temescal Canyon Road below an I-15 overpass.
Interstate 215	<ul style="list-style-type: none"> • Traverses north – south through Menifee • Connects Menifee to Perris, Riverside, and Murrieta • Two lanes in each direction 	<ul style="list-style-type: none"> • 115-kV Segment ASP 6 would be about 2 miles west of I-215
State Route 74	<ul style="list-style-type: none"> • Traverses northeast – southwest between Perris and Lake Elsinore • Four-lane divided highway 	<ul style="list-style-type: none"> • 115-kV Segment ASP2 and VIG4 would cross SR-74 where the highway intersects with Baker Street and be located alongside SR-74 from the Baker Street intersection approximately 500 feet north to Pasadena Avenue. • 115-kV Segment VIG3 would cross SR-74 at Conrad Ave and 115-kV Segment VIG2 and a section of 115-kV Segment VIG4 would be installed alongside and cross SR-74.

Key:

I-15 Interstate 15
I-215 Interstate 215
kV kilovolt
SR-74 State Route 74

1

2 *Arterials and Major Roadways*

3 The roadway system is the core circulation infrastructure for the City of Lake Elsinore because the
4 automobile is the main form of transportation in the area. The roadway hierarchy comprises seven
5 classifications: augmented urban arterial, urban arterial, major, secondary, collector, divided collector,
6 and special new roadway. Table 4.15-2 provides a description of the arterials and major roadways in the
7 proposed project area.
8

Table 4.15-2 Local Roadways Impacted

Road	Description	Adjacent Project Component
County of Riverside		
Temescal Canyon Road	<ul style="list-style-type: none"> • Two-lane arterial • Sidewalks not present near project area • Parking located on segment near project area 	<ul style="list-style-type: none"> • ASP1, ASP1.5, ASP2, VIG5, VIG6, VIG7, and VIG8 would be installed along Temescal Canyon Road after crossing I-15
Campbell Ranch Road/De Palma Road	<ul style="list-style-type: none"> • Four-lane arterial north of Santiago Canyon Road • Two-lane arterial south of Indian Truck Trail • Sidewalks present • Parking located on segment near project area 	<ul style="list-style-type: none"> • VIG7 would be installed alongside De Palma Road, and would cross De Palma Road east of Indian Truck Trail Road. • VIG8 would cross Campbell Road as it travels alongside Temescal Canyon Road.

Table 4.15-2 Local Roadways Impacted

Road	Description	Adjacent Project Component
Horsethief Canyon Road	<ul style="list-style-type: none"> Two-lane road Sidewalks not present near project area Parking located on segment near project area 	<ul style="list-style-type: none"> VIG7 would cross Horsethief Canyon Road at the north side of the intersection of De Palma Road.
Indian Truck Trail	<ul style="list-style-type: none"> Four-lane arterial Sidewalks present on south side of road Parking not allowed near project area 	<ul style="list-style-type: none"> VIG7 would cross Indian Truck Trail along Temescal Canyon Rd north of I-15.
City of Lake Elsinore		
Lake Street	<ul style="list-style-type: none"> Two-lane principal arterial Sidewalks are not present in the project area Parking located on segment near project area 	<ul style="list-style-type: none"> ASP2 and VIG5 would be located along Lake Street from I-15 to the Coal Avenue intersection.
Riverside Drive (SR-74)	<ul style="list-style-type: none"> Two-lane rural arterial Sidewalks are not present in the project area Parking located on segment near project area 	<ul style="list-style-type: none"> ASP2 and VIG4 would be located alongside SR-74 from the Baker Street intersection to the Pasadena Avenue intersection.
Newport Road	<ul style="list-style-type: none"> Four to six-lane urban arterial Sidewalks are present in the project area Parking not allowed near project area 	<ul style="list-style-type: none"> ASP7 would cross Newport Road at the Murrieta Road intersection.
Mission Trail	<ul style="list-style-type: none"> Four-lane local arterial Sidewalks are not present in the project area Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP4 would be located alongside Mission Trail from the Malaga Road intersection to the Skylark Substation.
Nichols Road	<ul style="list-style-type: none"> Two-lane collector road Sidewalks are not present in the project area Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP2 and VIG4 would cross Nichols Road southwest of the Pierce Road intersection.
Collier Avenue	<ul style="list-style-type: none"> Two to four-lane arterial Sidewalks present on the south side of the road. Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP3 would be located alongside Collier Avenue from the 3rd Street intersection to south of Chaney Street intersection. VIG3 would cross Collier Avenue.
Chaney Street	<ul style="list-style-type: none"> Four-lane collector road Sidewalks present on the south side of the road. Parking present on the south side of the road. 	<ul style="list-style-type: none"> ASP3 crosses Chaney Street at the Collier Avenue intersection.
Auto Center Drive/ Casino Drive	<ul style="list-style-type: none"> Two to four-lane collector road Sidewalks present Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP4 would be located alongside Auto Center Drive between the Grunder Drive intersection and the Diamond Drive intersection.

Table 4.15-2 Local Roadways Impacted

Road	Description	Adjacent Project Component
Diamond Drive	<ul style="list-style-type: none"> Four-lane major collector road Sidewalks are not present in the project area Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP4 would cross Diamond Drive at the Auto Center Drive intersection.
Lemon Street	<ul style="list-style-type: none"> Two-lane collector road Sidewalks present Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP4 would cross Lemon Street at the Mission Trail intersection.
Rosetta Canyon Drive	<ul style="list-style-type: none"> Four-lane collector road Sidewalks present Parking is not present on segment near project area 	<ul style="list-style-type: none"> VIG2 would cross Rosetta Canyon Drive at SR-74.
City of Perris		
Goetz Road	<ul style="list-style-type: none"> Two-lane collector road Sidewalks present on the west side of the road Parking is not present on segment near project area 	<ul style="list-style-type: none"> VIG 1 would cross Goetz Road north of Goldenrod Avenue.
Cities of Menifee and Wildomar		
Bundy Canyon Road	<ul style="list-style-type: none"> Two-lane minor arterial Sidewalks are not present in the project area Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP5 would be located alongside Bundy Canyon Road from the Beverly Street intersection within the City of Wildomar to the Murrieta Road intersection within the City of Menifee.
Menifee Road	<ul style="list-style-type: none"> Two-lane minor arterial Sidewalks are not present in the project area Parking is not present on segment near project area 	<ul style="list-style-type: none"> VIG1 begins near Menifee Road at the Valley Substation.
Murrieta Road	<ul style="list-style-type: none"> Two to four-lane collector road Sidewalks present Parking is not present on segment near project area 	<ul style="list-style-type: none"> ASP6 would be located alongside Murrieta Road from the Bundy Canyon Road intersection to the Newport Road intersection. ASP7 would be located alongside Murrieta Road from the Newport Road to the Newcomb Substation. ASP8 and VIG1 would cross Murrieta Road north of McLaughlin Road.

Key:

I-15 Interstate 15
SR-74 State Route 74

4.15.1.2 Existing Public Transit Systems, Rail, Air Transport, and Pedestrian and Bicycle Trails

Public Transit Systems

In the City of Lake Elsinore, five Riverside Transit Agency bus routes provide intra-city and regional transportation options. Bus routes within the proposed project area are listed in Table 4.15-3.

Table 4.15-3 Bus Routes within the Proposed Project Area

Bus Route	Location	Adjacent Project Components
Route 7	Collier Avenue, Diamond Drive, Mission Trail in City of Lake Elsinore	115-kV Segments ASP3, ASP4, and VIG3
Route 8	Riverside Drive, Diamond Drive, Mission Trail in City of Lake Elsinore	115-kV Segments ASP2, ASP4, and VIG4
Route 22	State Route 74	115-kV Segment VIG2
Route 40	Diamond Drive, Mission Trail in City of Lake Elsinore	115-kV Segment ASP4
Route 206	Interstate 15 in the cities of Lake Elsinore and Wildomar	Alberhill Substation, 115-kV Segments ASP1, ASP1.5, ASP2, ASP3, ASP5, VIG5, VIG6, and VIG7

Source: Riverside Transit Agency 2013

Key: kV = kilovolt

Railroads

There are currently no passenger railroad services within the proposed project area (City of Lake Elsinore 2011b). The Burlington Northern Santa Fe Railroad line from Riverside traverses the City of Perris along I-215 in the north and transitions southeast along Case Road.

Air Transportation

Two airports are located within 2 miles of the proposed projects, described in Table 4.15-4. Skylark Field Airport, Perris Valley Airport, and the applicant's Chino Air Operations Facility may be used for helicopter staging activities.

Table 4.15-4 Airports within the Proposed Project Area

Airport	Description	Location
Skylark Field Airport (private)	<ul style="list-style-type: none"> Provides glider and skydiving opportunities for the community and surrounding region and serves the needs of ultralight plane operators. Runways are 2,800 feet in length Average of 126 aircraft operations per week 	<ul style="list-style-type: none"> City of Lake Elsinore Less than 1,000 feet west of 115-kV Segments ASP4 and ASP5 About 4 miles from 115-kV Segment VIG4
Perris Valley Airport (public use)	<ul style="list-style-type: none"> The airport serves ultralight plane operators and is home to the Perris Valley Skydiving Company. Runway is 5,100 feet long Average of 75 aircraft operations per day 	<ul style="list-style-type: none"> Perris About 1.5 miles from 115-kV Segments VIG1 and ASP8 About 5 miles from 115-kV Segment ASP7

Sources: City of Perris 2008; City of Lake Elsinore 2011b; AirNav 2013a,b

The applicant's Chino Air Operations Facility, which may be used for helicopter operations, is located at Chino Airport (approximately 18 miles northwest of Ivyglen Substation). Chino Airport is a public use airport with asphalt runways, the longest of which is approximately 7,000 feet. An average of 451 aircraft operations occur at the airport per day (AirNav 2013c).

1 **Pedestrian and Bicycle Trails**

2 The pedestrian network in the proposed project area consists of paved sidewalks, unpaved sidewalks, and
 3 trails. Class II bikeways, one of four classifications within the Lake Elsinore Bikeway Plan, is the
 4 principle means of bicycle travel through the city. A Class II Bikeway is a restricted right-of-way (ROW)
 5 for the exclusive or semi-exclusive use of bicycles with the permitting of vehicle parking and vehicle/
 6 pedestrian cross flows. Several bikeway and trail segments are adjacent to or traverse the roadways that
 7 would be used during construction of the proposed projects. Bikeways and trails within the proposed
 8 project area are listed in Table 4.15-5.

9 **Table 4.15-5 Bikeways and Trails within the Proposed Project Area**

Trail	Location	Adjacent Project Components
Lake Elsinore Bikeway System		
Class II Bikeway	Northeast side of I-15, Lake Street, Nichols Road, Collier Avenue, Mission Trail, Lemon Street, Lost Road	115-kV Segments ASP1, ASP1.5, ASP2, ASP3, ASP4, ASP5, VIG2, VIG3, VIG4, VIG5, VIG6, VIG7, and VIG8
Lake Elsinore Trail System		
Historic Trail	Temescal Canyon Road, Lake Street	115-kV Segment ASP2 and VIG5
Lake Elsinore Lake, River, Levee Regional Trail	Baker Street Vicinity, Auto Center Drive/Casino Drive Vicinity	115-kV Segments ASP2, ASP4, VIG4, and VIG5, VIG6
Regional Trail	Temescal Canyon Road	115-kV Segments ASP1, ASP1.5, ASP2, ASP3, VIG5, and VIG6
County Trail System		
Community Trail	Lemon Street Vicinity, Lost Road Vicinity	115-kV Segment ASP2, ASP4, ASP5, VIG6, VIG7, VIG8
Regional Trail	Bundy Canyon Road Vicinity	115-kV Segment ASP5, VIG8
Combination Trail and Class I Bikeway	Crosses State Route 74	115-kV Segments ASP2, ASP4, VIG1 and VIG2, VIG5, VIG6, VIG7, VIG8
Regional Trail	Trans north-south west of Murrieta Road	115-kV Segment VIG1
Historic Trail	I-15, Lake Street	115-kV Segments ASP1, ASP1.5, VIG8
Design Guidelines Trail	I-15	115-kV Segments VIG7, VIG8

Source: City of Lake Elsinore 2011b

Key: kV = kilovolt

10

11 **Parking**

12 A parking lot for a car dealership located on Auto Center Road, and parking lots for businesses located
 13 along Malaga Road would be crossed by 115-kV Segment ASP4. On-street parking is located along
 14 several of the local streets crossed by the projects, as presented in Table 4.15-1. No public parking lots
 15 would be crossed by project components.

16

17 **4.15.1.3 Existing Levels of Service**

18

19 **Methodology**

20 **Level of Service Definition**

21 Current guidelines under CEQA for traffic impact analyses focus on analyzing the delay that vehicles
 22 experience at intersections and on roadway segments. That delay is measured using Level of Service
 23 (LOS) ranking. Senate Bill 743 requires changes to CEQA guidelines in how transportation impacts are
 24 addressed. Draft guidelines would remove the requirement for an LOS analysis and focus on vehicle
 25 miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips

generated. These pending guidelines would place less emphasis on traffic congestion and more on how traffic would impact greenhouse gas emissions and promote multimodal networks and diverse land uses. Since construction-related trips are temporary, multimodal decisions and changes to land use would not be impacted by the proposed projects. Further, several General Plans contain LOS goals. Therefore, LOS is the most appropriate metric to identify potential impacts of construction activities on nearby roadway segments and intersections for the proposed projects.

LOS is a qualitative measure that characterizes traffic congestion on a scale of A to F, with LOS A representing a free-flow condition and LOS F representing extreme congestion. LOS standards can apply to either intersections or links (a section of street between two intersections). Generally speaking, the LOS represents the ability of a roadway or an intersection to accommodate vehicular traffic. Table 4.15-6 provides the six LOS categories for signalized and unsignalized intersections.

Table 4.15-6 Level of Service Criteria (Signalized and Unsignalized Intersections)

Level of Service	Description
LOS A	LOS "A" conditions occur when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
LOS B	LOS "B" conditions occur with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.
LOS C	LOS "C" conditions are characterized by average traffic delays. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
LOS D	LOS "D" conditions are characterized by long traffic delays. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
LOS E	LOS "E" conditions are characterized by very long traffic delays. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent occurrences.
LOS F	LOS "F" conditions are characterized by severe congestion. This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.

Source: LLG 2016a,b

Key:

LOS Level of Service

v/c volume-to-capacity ratio

Intersections are used as actual control points, and roadway capacity is generally a function of peak hour intersection performance and the corresponding peak hour volumes. System performance is typically a function of intersection performance. Therefore, the Traffic Impact Analyses for the proposed Alberhill Project (LLG 2016a) and proposed Valley-Ivyglen Project (LLG 2016b) focused on intersection performance during the AM and PM peak hours. Temporary staging areas would serve as reporting locations for workers and equipment; therefore, the most intensive traffic is expected to occur at intersections near staging areas. Specifically, the analysis evaluated existing conditions, construction-related traffic generation, and short-term construction impacts to (LLG 2016ab):

- 17 key intersections that could be affected during construction of the proposed Alberhill Project;

- 11 key intersections that could be affected during construction of the proposed Valley–Ivyglen Project; and
 - Nine key intersections that could be affected during construction of both proposed projects.

Intersections were grouped into zones based on their proximity to specific staging areas. Key intersections and zones are presented in the Valley–Ivyglen and Alberhill Traffic Impact Analyses in Appendix J (Figure 3.1 of Appendix J-1 and Figure 3.1 of Appendix J-2). A previous traffic study conducted in 2012 analyzed impacts on several key intersections related to the proposed Alberhill Project. The analysis determined that the following intersections would continue to operate at LOS B or better and that the proposed Alberhill Project would not result in significant changes to LOS or vehicle delay (LLG 2012):

- Auto Center Drive/Casino Drive at Diamond Drive
 - Mission Trail at Malaga Road
 - Mission Trail at Corydon Street
 - Mission Trail at Bundy Canyon Road
 - Orange Street at Bundy Canyon Road
 - Trumble Road at Matthews Road (SR-74)
 - Sherborn Street at Magnolia Avenue

Therefore, these intersections were not included in this analysis.

Key Intersections' Levels of Service

In conformance with the Cities of Lake Elsinore, Wildomar, Perris, and Menifee; County of Riverside; and Caltrans requirements, AM and PM peak hour operating conditions for the key signalized intersections were evaluated using the Highway Capacity Manual operations method of analysis (Transportation Research Board 2010). The measure of driver discomfort, frustration, lost travel time, and fuel consumption known as “control delay” was used to define the LOS for signalized and unsignalized intersections.¹ The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the travel time that would result during ideal conditions: in the absence of traffic control, in the absence of geometric delay, in the absence of any incidents, and when there are no other vehicles on the road.

Tables 4.15-7 and 4.15-8 present intersection LOS results for the key intersections identified for the proposed Alberhill and Valley-Ivyglen Projects. With the exception of the intersection of Lake Street and the I-15 Northbound Ramp and the intersection of Menifee Road at Pinacate Road (SR-74), all of the key intersections operate at LOS D or better under existing conditions. The intersections of Lake Street at I-15 Northbound Ramps and Menifee Road at Pinacate Road (SR-74) are key intersections for both the proposed projects and operate at LOS F during the AM peak hour. Additional detail is contained in the Traffic Impact Analysis (Appendix J).

¹ Unsignalized intersections include all-way stop-controlled intersections and one-way and two-way stop controlled intersections.

Table 4.15-7 Existing Peak Hour Intersection Levels of Service Alberhill Project

No.	Intersection	AM	PM
		LOS	LOS
Zone 1 Alberhill Substation and 500-kV Transmission Lines			
1	Indian Truck Trail at Temescal Canyon Road	D	D
2	Indian Truck Trail at I-15 Northbound Ramps	D	C
3	Indian Truck Trail at I-15 Southbound Ramps	C	C
4	Campbell Ranch Road/De Palma Road at Indian Truck Trail	D	D
5	Horsethief Canyon Road at Temescal Canyon Road	B	B
6	Horsethief Canyon Road at De Palma Road	A	B
7	Concordia Ranch Road at Temescal Canyon Road	A	A
8	Lake Street at I-15 Northbound Ramps	F	C
9	Lake Street at I-15 Southbound Ramps	C	D
10	Lake Street at Temescal Canyon Road	A	B
Zone 2 115-kV Subtransmission Lines and Staging Areas			
11	I-15 Northbound Ramps at Railroad Canyon Road	C	C
12	I-15 Southbound Ramps at Diamond Drive	D	D
13	Diamond Drive at Lakeshore Drive/Mission Trail	D	D
14	Mission Trail at Lemon Street	A	A
15	Mission Trail at Bundy Canyon Road	B	B
16	I-15 Southbound Ramps at Bundy Canyon Road	C	C
17	I-15 Northbound Ramps at Bundy Canyon Road	C	D
Zone 3 115-kV Subtransmission Lines			
18	I-215 Northbound Ramps at	A	A

Table 4.15-7 Existing Peak Hour Intersection Levels of Service Alberhill Project

No.	Intersection	AM	PM
		LOS	LOS
	Matthews Road (SR-74)		
19	Menifee Road at Pinacate Road (SR-74)	F	C
20	McCall Blvd at I-215 Southbound Ramps	D	C
21	McCall Blvd at I-215 Northbound Ramps	C	D
22	McCall Blvd at Menifee Road	D	C
Zone 4 Corona Quarry (Corona Rock and Asphalt)			
23	I-15 Southbound Ramps at Magnolia Avenue	D	D
24	I-15 Northbound Ramps at Magnolia Avenue	C	C
25	El Camino Avenue/Downs Way at Magnolia Avenue	D	C
26	Sherborn Street at Magnolia Avenue	B	C

Source: LLG 2016a

Key:

[bold text]Substandard LOS

I-15 Interstate 15

I-215 Interstate 215

KV kilovolt

LOS level of service

SR-74 State Route 74

1
2

Table 4.15-8 Existing Peak Hour Intersection Operations Valley-Ivyglen Project

No.	Intersection	AM	PM	
		LOS	LOS	
115-kV Subtransmission Lines				
Zone 1 Ivyglen Substation Staging Area				
1	Temescal Canyon Road at Campbell Ranch Road	B	B	
Zone 1 Ivyglen Substation Staging Area and Zone 2 Staging Area VIG9				
2	Indian Truck Trail at Temescal Canyon Road	D	D	
3	Indian Truck Trail at I-15 Northbound Ramps	D	C	
4	Indian Truck Trail at I-15 Southbound Ramps	C	C	

Table 4.15-8 Existing Peak Hour Intersection Operations Valley-Ivyglen Project

No.	Intersection	AM	PM
		LOS	LOS
5	Indian Truck Trail at Campbell Ranch Road	D	D
Zone 2 Staging Area VIG9			
6	Horsethief Canyon Rd at Temescal Canyon Road	B	B
7	Horsethief Canyon Road at De Palma Road	A	B
8	Lake St at I-15 Northbound Ramps	F	C
9	Lake St at I-15 Southbound Ramps	C	D
10	Lake St at Temescal Canyon Road	A	B
Zone 3 Staging Area VIG5, VIG6, VIG7, and VIG8			
11	Central Ave (SR-74) at Rosetta Canyon Drive	C	B
12	Central Avenue (SR-74) at I-15 Northbound Ramps	C	C
13	Central Ave (SR-74) at I-15 Southbound Ramps	C	D
14	Central Avenue (SR-74) at Collier Avenue	D	D
Zone 4 Valley substation and Staging Are VIG2			
15	Menifee Rd at Pinacate Road (SR-74)	F	D
16	McCall Blvd at I-215 Southbound Ramps	D	C
17	McCall Blvd at I-215 Northbound Ramps	C	D
18	McCall Blvd at Menifee Rd.	D	C

Source: LLG 2016b

Key:

[bold text]Substandard LOS

I-15 Interstate 15

I-215 Interstate 215

kV kilovolt

LOS level of service

SR-74 State Route 74

1 **4.15.2 Regulatory Setting**

2 **4.15.2.1 Federal**

5 ***Federal Aviation Administration and Helicopter External-Load Operations***

6 *Helicopter External-Load Operations*

7 The Federal Aviation Administration (FAA) administers the Federal Aviation Regulations (Title 14 of
8 the Code of Federal Regulations [CFR]). CFR Title 14, Part 133 establishes regulations for Rotorcraft
9 External-Load Operations. All operators of rotorcraft (helicopters) with external loads, including the
10 pilot, mechanics, and ground crew, must be certified Rotorcraft External-Load Operators pursuant to 14
11 CFR Part 133. The helicopters used must also be certified. Rotorcraft External-Load Operator
12 Certificates are valid for 24 months. Operators are permitted to conduct external-load operations over
13 densely populated areas or areas congested with structures and objects with FAA approval of a
14 Congested Area Plan (United States Government Printing Office 2016).

15 For the proposed projects, all Congested Area Plans would be approved by the Riverside Flight
16 Standards District Office. Site inspections of Congested Area Plan operational areas, including
17 emergency landing areas, are generally completed by an FAA inspector for new plans or sites with which
18 the inspector is not familiar. Monitoring of Congested Area Plan operation by an FAA inspector occurs
19 intermittently to the extent that representatives are available and depending on risk levels associate with
20 the project (Peters 2012).

21 In addition, all helicopter external-load operations must be conducted in conformance with the Rotorcraft
22 Load Combination Flight Manual, which must be prepared by the operator and approved by the FAA.
23 The approved Flight Manual will specify the types of external loads that may be carried (Class A though
24 D), and maximum weight of external loads. The FAA requires that Flight Manual review be completed
25 by a qualified FAA Aviation Safety Inspector who, whenever possible, has experience as an external-
26 load pilot.

27 Holders of Rotorcraft External-Load Operator Certificates are inspected two to three times per year
28 regardless of whether a Congested Area Plan is in operation. Additional inspections may be conducted if
29 a Congested Area Plan is involved (Peters 2012). FAA inspectors conduct Ramp Inspections and Base
30 Inspections as specified in 14 CFR Part 133. During Ramp Inspections, the attaching means and
31 retraining device for external loads and pilots and personnel approved to operate the attaching means are
32 inspected. Personnel proficiency with external-load operations may be observed. A ramp inspection is
33 generally an on-site surveillance of an actual external-load operation. During Base Inspections, operator
34 records are inspected and interviews may be conducted.

35 **Airspace Restrictions**

36 FAA regulation 14 CFR 77 requires notification of any construction or alteration that would result in a
37 structure being greater than 200 feet above ground level from its base or that would exceed a specified
38 height from an imaginary slope from the nearest runway. The imaginary slope described below is
39 measured from the nearest point of the nearest runway to the proposed structure (United States
40 Government Printing Office 2015):

- 41 • For airports with a runway greater than 3,200 feet in length, 1 vertical foot for every 100
42 horizontal feet for a horizontal distance of 20,000 feet.

- 1 • For airports with a runway 3,200 feet or less in length, 1 vertical foot for every 50 horizontal feet
2 for a horizontal distance of 10,000 feet.
3 • For heliports, 1 vertical foot for every 25 horizontal feet for a horizontal distance of 5,000 feet.

5 ***Occupational Safety and Health Administration***

6 The Occupational Safety and Health Administration (OSHA) administers Occupational Safety and
7 Health Standards (CFR Title 29) that establish regulations for safety in the workplace and construction
8 safety. CFR Title 29, Parts 1910.183 and 1926.551 establish regulations for helicopter use during
9 construction. Briefings are required prior to each day of helicopter operation about the plan of operation
10 for the pilot and ground personnel. Cargo hooks used for securing helicopter external loads must be
11 tested electrically and mechanically prior to each day of operation. In addition, the standards address
12 weight limitations, static charge dissipation, and signal systems between air and ground crews.

13 **4.15.2.2 State**

14 ***California Department of Transportation***

15 Caltrans is responsible for the oversight of state highways within California. Caltrans requires that all
16 work done within a state highway ROW obtain an encroachment permit from Caltrans. Encroachment
17 permits must be obtained for transmission lines that span or cross any state roadways (Caltrans 2015a). In
18 addition, Caltrans has the discretionary authority to issue special permits for the movement of vehicles/
19 loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division
20 15 of the California Vehicle Code. Completion of a Transportation Permit application is required for
21 special permit requests (Caltrans 2015b). Encroachment permits for state highways, including I-15 and
22 I-215, would be obtained from Caltrans (Caltrans 2015a).

23 Guidelines provided by Caltrans indicate LOS C as the minimum LOS target for basic freeway segments
24 and signalized intersections. Where state facilities currently operate below LOS C, the existing measure
25 of effectiveness should be maintained (i.e., density for freeway segments and ramps, and control delay
26 per vehicle for signalized intersections) (Caltrans 2002).

27 **4.15.2.3 Regional and Local**

28 ***Encroachment Permits***

29 Construction of the proposed projects could affect transportation ROWs, access, traffic flow, pedestrian
30 and bicycle facilities, and parking on public streets and highways. Therefore, it would be necessary for
31 the applicant and/or the construction contractor to obtain encroachment permits or similar legal
32 agreements from the public agencies responsible for each affected roadway or other transportation ROW.
33 Such permits are needed for ROWs that would be crossed by a transmission line, where construction
34 activities would require a temporary lane closure, or where construction would require the use of a public
35 ROW for a parallel installation. Permits for local roads would be obtained from Riverside County, and/or
36 the Cities of Lake Elsinore, Wildomar, Perris, and Menifee. In addition, relocation of the agricultural
37 water pipeline at the proposed Alberhill Substation would also require an encroachment permit from
38 Riverside County.

39 ***Riverside County Airport Land Use Commission***

40 The Riverside County Airport Land Use Commission (ALUC) is responsible for development of the
41 Riverside County Airport Land Use Compatibility Plan and each individual airport land use compatibility

1 plan within the umbrella compatibility plan policy document. This plan includes policies applicable to
 2 land use compatibility planning in the vicinity of airports throughout Riverside County (Riverside
 3 County ALUC 2004b). 115-kV Segment ASP8 and sections of 115-kV Segment VIG1 fall within the
 4 southern boundary of Zone E of the Perris Valley Airport Influence Area and the Aircraft Approach
 5 Accident Risk Intensity Contours (landings from the south), as defined in the Perris Valley Airport Land
 6 Use Compatibility Plan (Riverside County ALUC 2010). Zone E is the least restrictive of the
 7 compatibility zones. Countywide policies require review of any proposed structure taller than 100 feet
 8 within Zone E. The ALUC and compatibility with the proposed projects are further discussed in Section
 9 4.8, "Hazards and Hazardous Materials."

10

11 General Plans

12 Components of both proposed projects would traverse unincorporated Riverside County and the Cities of
 13 Lake Elsinore and Menifee. Components of the proposed Alberhill Project would also traverse the City
 14 of Wildomar, and components of the proposed Valley–Ivyglen Project would also traverse the City of
 15 Perris. The general plans establish various policies to encourage public transit and bicycle use. The LOS
 16 for acceptable roadway performance is also identified in the general plans. Relevant transportation
 17 policies and ordinances are presented in Table 4.15-9.

18 **Table 4.15-9 Relevant Transportation Policies and Ordinances**

Policy	Description
Caltrans	
Encroachment Permits	An encroachment permit must be obtained for all proposed activities related to the placement of encroachments within, under, or over the State highway ROWs. ⁽¹⁾
Oversized Vehicles	A special permit must be obtained to operate or move a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum limitations on State highways. Maximum limitations are generally as follows: Width = 102 inches, Height = 14 feet, Length = 75 feet, Weight = 80,000 lbs. ⁽¹⁾
Target LOS Standard	LOS D ⁽²⁾
Riverside County	
Encroachment Permits	A permit is required from the county transportation director before any work is conducted or improvements placed on, over, or under any county highway or ROW. ⁽³⁾
Oversized Vehicles	A permit from the road commissioner is required to operate a vehicle on county roads of size or weight of vehicle or load exceeding the maximum specified in the California Vehicle Code. ⁽³⁾
Target LOS Standard	LOS C. Exceptions to LOS C in General Plan do not apply to intersections included in this analysis. ⁽⁴⁾
Congestion Management Program (CMP)	I-15, I-215, and SR-74 are part of the CMP highway and road system. Minimum LOS for CMP Roadways is LOS E, except when intersection/segment was LOS F in 1991. A deficiency plan is required when a CMP roadway or highway segment falls to LOS F. ⁽⁵⁾
City of Lake Elsinore	
Encroachment Permits	An encroachment permit is required from the City Manager or City Engineer before any work is conducted or facilities placed over, under, or along a public place. ⁽⁶⁾
Oversized Vehicles	Commercial vehicles exceeding a maximum gross weight of 3 tons are prohibited on streets not designated as a truck route, except vehicles necessary in the construction, installation, or repair of any public utility. ⁽⁶⁾
Target LOS Standard	LOS D ⁽⁷⁾
City of Wildomar	
Work in public ROW	A permit from the Transportation Director is required before excavation or installation of utilities in a public street or right-of-way. ⁽⁸⁾

Table 4.15-9 Relevant Transportation Policies and Ordinances

Policy	Description
Oversized Vehicles	A permit from the Road Commissioner is required to operate a vehicle on City roads of size or weight of vehicle or load exceeding the maximum specified in the California Vehicle Code. ⁽⁸⁾
Target LOS Standard	LOS C on city maintained roadways and LOS D at intersections of any combination of secondary highways, major highways, arterials, urban arterials, expressways, state highways, or freeway ramp intersections ⁹
City of Perris	
Encroachment Permits	A permit is required from the director of public works before any work is conducted or improvements placed on, over, or under any city street, ROW, or public property. ⁽¹⁰⁾
Oversized Vehicles	Vehicles exceeding a maximum gross weight of 3 tons are prohibited on streets not designated as a truck route, except vehicles necessary in the alteration or construction for any structure on restricted streets for which a building permit has been obtained. ⁽¹⁰⁾
Target LOS Standard	LOS D ⁽¹¹⁾
City of Menifee	
Encroachment Permits	Menifee has adopted the Riverside County ordinance regarding encroachments. ⁽¹²⁾
Oversized Vehicles	Menifee has adopted the Riverside County ordinance regarding oversized and overweight vehicles. ⁽¹²⁾
Target LOS Standard	LOS D, or LOS E, at constrained intersections near I-215 ⁽¹³⁾
City of Corona	
Encroachment Permits	A permit is required from the director of public works before any work is conducted or improvements placed on, over, or under any city street, ROW, or public property. ⁽¹⁴⁾
Oversized Vehicles	Commercial vehicles exceeding a maximum gross weight of 6,000 pounds are prohibited on streets not designated as a truck route, except vehicles necessary in the construction, installation, or repair of any public utility. ⁽¹⁴⁾
Target LOS Standard	LOS D ⁽¹⁵⁾

Sources:

- 1 California Streets and Highways Code (California Law 2015)
- 2 Guide for the Preparation of Traffic Impact Studies (Caltrans 2002)
- 3 County of Riverside Municipal Code (Municode 2015a)
- 4 Riverside County General Plan Circulation Element (Riverside County 2014)
- 5 Congestion Management Program (Riverside County Transportation Commission 2011)
- 6 City of Lake Elsinore Municipal Code (Codepublishing 2015a)
- 7 City of Lake Elsinore General Plan (City of Lake Elsinore 2011b)
- 8 City of Wildomar Municipal Code (Qcode 2015a)
- 9 City of Wildomar General Plan (City of Wildomar 2015)
- 10 City of Perris Municipal Code (Municode 2015b)
- 11 City of Perris General Plan (City of Perris 2008)
- 12 City of Menifee Municipal Code (American Legal 2015a)
- 13 City of Menifee General Plan (City of Menifee 2013)
- 14 City of Corona Municipal Code (American Legal 2015b)
- 15 City of Corona General Plan (EIP Associates 2004)

Key:

- CMP Congestion Management Program
- I-15 Interstate 15
- I-215 Interstate 215
- lbs pounds
- LOS Level of Service
- ROW right-of-way
- SR-74 State Route 74

1 **4.15.3 Methodology and Significance Criteria**

2 ***Significance Criteria***

3 Potential impacts on transportation and traffic were evaluated according to the following significance
4 criteria. The criteria are based on Appendix G of the CEQA Guidelines. The proposed projects would
5 cause a significant impact on transportation and traffic if they would:

- 6
- 7 a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for
8 the performance of the circulation system, taking into account all modes of transportation
9 including mass transit and non-motorized travel and relevant components of the circulation
10 system, including but not limited to intersections, streets, highways and freeways, pedestrian and
11 bicycle paths, and mass transit;
- 12
- 13 b) Conflict with an applicable congestion management program, including, but not limited to level
14 of service standards and travel demand measures, or other standards established by the county
15 congestion management agency for designated roads or highways;
- 16
- 17 c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change
18 in location that results in substantial safety risks;
- 19
- 20 d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous
21 intersections) or incompatible uses (e.g., farm equipment);
- 22
- 23 e) Result in inadequate emergency access;
- 24
- 25 f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or
26 pedestrian facilities, or otherwise substantially decrease the performance or safety of such
27 facilities; or
- 28
- 29 g) Result in inadequate parking that would result in a significant impact on the environment.

30 ***Circulation System Impact Methodology***

31 Information regarding the existing roadway system and transportation infrastructure was obtained from
32 the following sources: highway maps, route alignment maps, the Proponent's Environmental Assessment,
33 and other maps from various reports and websites of the affected state and local jurisdictions. Roadway
34 capacities and operating criteria were obtained from general plans, traffic departments, and public works
35 departments of the affected agencies. Lane information was obtained from aerial photographs, local
36 government agencies, and public maps. Traffic volume data, LOS, and other data were obtained from
37 agency websites, databases, and the traffic impact analyses for the proposed Valley-Ivyglen and
38 Alberhill Projects (Appendices J-1 and J-2; LLG 2016a, 2016b). The traffic impact analyses developed
39 for this section are consistent with the guidelines and standards of the Riverside County Transportation
40 Department Impact Analysis Preparation Guide (2008). The traffic analysis compares near-term baseline
41 traffic conditions with project build-out conditions. Traffic conditions are defined as follows:

- 42
- 43 • **Baseline traffic conditions:** Existing traffic conditions obtained from traffic counts in 2012 and
44 2014. A count validation review was conducted in 2015 and determined that 2015 counts were 5
45 percent lower; therefore, the more conservative 2012 and 2014 traffic counts were used.
 - 46 • **Near-term traffic conditions:** Baseline traffic conditions plus additional traffic that would
47 result from the associated project (i.e., traffic volumes from the proposed Valley-Ivyglen Project
48 were used for the proposed Alberhill Project's near-term conditions, and proposed Alberhill
49 Project traffic volumes were used for the proposed Valley-Ivyglen Project near-term conditions).

- 1 • **Construction traffic conditions:** Near-term baseline traffic conditions plus construction traffic
2 generated from proposed project construction activities.

3
4 The traffic impact analyses calculated LOS for existing conditions and project build-out conditions using
5 the methodology in the 2010 HCM and Synchro (version 9.0) computer software. Synchro is a software
6 program used to analyze an intersections capacity based on different traffic conditions and optimizations.
7

8 The process for the traffic analysis was as follows:
9

- 10 • Temporary staging areas would be the primary access point for worker vehicles and truck
11 deliveries and therefore would see the most traffic-intensive construction activity; staging areas
12 were incorporated into the analysis based on their proximity to other staging areas and existing
13 traffic conditions on nearby roads.
- 14 • Trip generation was based on assumptions by the applicant regarding the maximum number of
15 daily construction workers and number of heavy construction vehicles. Heavy vehicle trips were
16 converted to passenger car equivalent trips, as they are generally considered to have a greater
17 impact on traffic than passenger vehicles.
- 18 • The traffic analysis assumed that 100 percent of the maximum construction worker vehicles and
19 heavy vehicles would access each of the staging areas included in the analysis concurrently, so
20 that traffic analysis results would be conservative.
- 21 • Construction trips were distributed to the existing road network based on a variety of factors,
22 including location of the staging area in relation to the street network and major roadways;
23 physical characteristics such as the number of lanes, presence of traffic signals, and delivery and
24 construction routes; and existing traffic volumes and congestion.
- 25 • Project build-out LOS was calculated for study intersections based on near-term traffic volumes
26 and assigned construction traffic volumes.
- 27 • The change in LOS between near-term conditions and construction conditions was considered
28 significant if an intersection failed to meet the jurisdiction's acceptable LOS. If the intersection
29 fails to meet the jurisdiction's acceptable LOS under near-term conditions without the project,
30 the impact under construction conditions was considered significant if there was an increase in
31 vehicle delay (in seconds) at the intersection (see Table 4.15-9).

32 **4.15.4 Environmental Impacts and Mitigation Measures (Valley-Ivyglen Project)**

33 **4.15.4.1 Project Commitments (Valley-Ivyglen Project)**

34
35 The applicant has committed to the following as part of the design of the proposed Valley-Ivyglen
36 Project. See Section 2.6, "Project Commitments," for a complete description of each project
37 commitment.

- 38 • **Project Commitment B: Worker Environmental Awareness Plan.** Prior to construction of the
39 proposed projects, a Worker Environmental Awareness Plan would be developed based on final
40 engineering designs, the results of preconstruction surveys, project commitments, and mitigation
41 measures imposed by the California Public Utilities Commission. A presentation would be
42 prepared by the applicant and shown to all site workers prior to their start of work. A record of
43 all trained personnel would be kept with the construction foreman. In addition to the instruction
44
45
46

for compliance with any site-specific biological or cultural resource protective measures and project mitigation measures, all construction personnel would also receive the following:

- A list of phone numbers of the applicant's personnel with the (archeologist, biologist, environmental coordinator, and regional spill response coordinator);
- Instruction on the South Coast Air Quality Management District Rule 403 for control of dust;
- Instruction on what typical cultural resources look like, and if discovered during construction, to suspend work in the vicinity of any find and contact the site foreman and archeologist or environmental coordinator;
- Instruction on individual responsibilities under the Clean Water Act, the Storm Water Pollution Prevention Plan for the projects, site-specific Best Management Practices, and the location of Material Safety Data Sheets for the projects;
- Instructions to notify the foreman and regional spill response coordinator in case of hazardous materials spills and leaks from equipment or upon the discovery of soil or groundwater contamination;
- A copy of the truck routes to be used for material delivery; and
- Instruction that noncompliance with any laws, rules, regulations, or mitigation measures could result in being barred from participating in any remaining construction activities associated with the projects.

- **Project Commitment G: Aircraft Flight Path Safety Provisions and Consultations.** Prior to construction, the applicant shall consult with the Federal Aviation Administration and ensure the filing of forms and associated specifications per the requirements of Federal Aviation Regulations Part 77 (Objects Affecting Navigable Airspace). The applicant shall review all recommendations and/or determinations from the FAA and mark and/or light the FAA recommended components where the applicant finds they are reasonable and feasible.

- **Project Commitment H: Noise Control.** The applicant shall implement the following noise control measures for the proposed projects:

- All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 7 a.m. to 7 p.m. and prohibited on Sundays and all legally proclaimed holidays. SCE will obtain all relevant ministerial or non-discretionary noise permits from local jurisdictions. In the event that construction activities are necessary on days or hours outside of what is specified by the local ordinance, SCE would provide five-day advanced notification, including a general description of the work to be performed, location and hours of construction anticipated, to the CPUC, the local jurisdiction, and residents within 300 feet of the anticipated work, as well route all construction traffic away from residences, schools and recreational facilities to the extent feasible.
- Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- Construction traffic shall be routed away from residences and schools, where feasible.
- Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A "common sense" approach to vehicle use shall be applied: if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. Note:

- 1 certain equipment, such as large diesel-powered vehicles require extended idling for warm-
2 up and repetitive construction tasks.
- 3 - The applicant will notify all receptors within 500 feet of construction of the potential to
4 experience significant noise levels during construction.
- 5 - During construction, the applicant will use a temporary noise barrier that blocks the line of
6 sight between the construction area and the residence areas where sensitive receptors would
7 be subjected to significant noise impacts.
- 8 - The applicant would shield small stationary equipment with portable barriers within 100 feet
9 of residences, where feasible.
- 10 - The applicant would minimize engine idling and turn off engines when not in use.
- 11 - Where blasting is required for the Alberhill system Project, the applicant would conduct
12 additional pre-blast notification and coordination with residents, utilities, and others that may
13 be affected by blasting operations.

14

15 **4.15.4.2 Impacts Analysis (Valley-Ivyglen Project)**

16

17 **Impact TT-1 (VIG): Conflict with an applicable plan, ordinance or policy establishing a measure
18 of effectiveness for the performance of the circulation system, taking into
19 account all modes of transportation including mass transit and non-
20 motorized travel and relevant components of the circulation system,
21 including but not limited to intersections, streets, highways and freeways,
22 pedestrian and bicycle paths, and mass transit.**

23 *LESS THAN SIGNIFICANT WITH MITIGATION*

25 The analysis presented in this section focuses on the LOS based on the evaluation presented in the traffic
26 impact analysis of existing plus project build out conditions, as described in the methodology section
27 above (LLG 2016a). Impacts that may occur on public transit, bikeways, or pedestrian facilities are
28 discussed under Impact TT-6 (VIG). Impacts to intersections covered by the Congestion Management
29 Program are discussed under Impact TT-2 (VIG).

30

31 **Construction**

32 Construction of the proposed Valley–Ivyglen Project would result in a temporary increase in traffic
33 volumes on the regional and local roadways that provide access to the construction areas. Traffic would
34 be generated by construction worker commute trips and material deliveries. Hauling materials such as
35 poles, concrete, conductor, excavation spoils, and removed poles would temporarily increase existing
36 traffic volumes along the proposed 115-kV subtransmission line segments.

37 The applicant estimates that during the 27-month construction period, the daily workforce would include
38 as many as 125 workers on a peak day of construction (i.e., if multiple components of the proposed
39 Valley–Ivyglen Project were being constructed simultaneously). It is anticipated that most personnel
40 would drive to a staging area at the beginning of each workday and depart from the staging area at the
41 end of the day (7:00 a.m. to 7:00 p.m., Monday through Saturday; Project Commitment H). Throughout
42 the day, some personnel would travel between staging areas and worksites (Figures 2-2a to 2-2i).
43 Throughout the construction period, material delivery to staging areas would vary. As stated in Chapter
44 2, “Project Description,” delivery activities requiring extensive street use would be scheduled to occur
45 during the off-peak hours to the extent feasible and in accordance with applicable local ordinances. Since

1 construction of the various project components would occur over a dispersed area, different local roads
2 along the route would be impacted at different times during construction.

3
4 Construction trip generation estimates for the proposed Valley–Ivyglen Project are presented in Table
5 4.15-10. The analysis assumed that construction in each zone would occur concurrently and would
6 require the maximum number of construction workers and heavy vehicles. However, as stated above, the
7 applicant assumes a maximum number of 125 construction workers on a peak day of construction;
8 therefore, peak day construction trip generation for the project is expected to be similar to construction
9 trips for a single zone.
10

Table 4.15-10 Construction Trip Generation (Valley–Ivyglen Project)

Project Component	Vehicles Per Day	PCE Factor	Passenger Car Equivalent Trips		
			Daily Trips	AM Peak Hour	PM Peak Hour
Zone 1, 2, 3, 4 115-kV Subtransmission Lines					
Construction Worker Vehicles	125	1.0	250	0 ⁽¹⁾	125
Heavy Vehicles	28	2.5	140	28	28
	<i>Subtotal</i>	153		390	28
					153

Source: LLG 2016b

Notes:

⁽¹⁾ Construction workers assumed to arrive before the AM peak hour (defined as 7:00 to 9:00 a.m.) and leave during the PM peak hour (defined as 4:00 to 6:00 p.m.).

Key:

kV kilovolt

PCE passenger car equivalent

11 Acceptable roadway LOS ranges from LOS C to LOC E, depending on the jurisdiction. The impacts of
12 project-related construction traffic during the AM peak hour (7:00 to 9:00 a.m.) and the PM peak hour
13 (4:00 to 6:00 p.m.) were evaluated based on analysis of existing traffic conditions plus project build out
14 traffic conditions at the 8 key intersections. Table 4.15-11 shows the results of the traffic analysis.
15

16 As shown in Table 4.15-11, no intersection LOS would be significantly impacted from traffic generated
17 during construction of the proposed Valley–Ivyglen Project. Impacts on the LOS would be less than
18 significant.
19

20 Installation of the proposed Valley–Ivyglen Project 115-kV lines require roadway crossings during
21 installation of the proposed overhead lines and temporary structure installation and wire stringing
22 activities would occur along roadways as described in Section 2.4.4.4, “Traffic Control and Lane
23 Closure.” Roadways with potential temporary lane closures along with reduction in traffic capacity are
24 presented in Table 4.15-12. Installation of these segments would require temporary lane closures between
25 two and four days. Underground conduits for telecommunication lines would also require temporary lane
26 or road closures. These activities would reduce the capacity of the roadways by 50 percent and could
27 temporarily disrupt automobile traffic patterns and increase delays during construction. This could result
28 in a significant impact. Mitigation Measure (MM) TT-1 would require development of a Traffic
29 Management and Control Plan prior to commencement of construction activities to reduce traffic flow
30 impacts. Impacts would be less than significant with mitigation.
31

32

1

Table 4.15-11 Peak Hour Intersection Operation During Construction (Valley-Ivyglen Project)

No.	Intersection	AM				PM				
		Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?	Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?	
115-kV Subtransmission Lines and Staging Areas										
Zone 1 Ivyglen Substation Staging Area										
1	Temescal Canyon Road at Campbell Ranch Road	B	B	D	No	B	B	D	No	
Zone 1 Ivyglen Substation Staging Area and Zone 2 Staging Area VIG9										
2	Indian Truck Trail at Temescal Canyon Road	D	D	D	No	D	D	D	No	
5	Indian Truck Trail at Campbell Ranch Road	D	D	D	No	D	D	D	No	
Zone 2 Staging Area VIG9										
6	Horsethief Canyon Rd at Temescal Canyon Road	B	B	C	No	B	C	C	No	
7	Horsethief Canyon Rd at De Palma Road	A	A	C	No	B	B	C	No	
10	Lake St at Temescal Canyon Road	A	C	D	No	A	C	D	No	

Table 4.15-11 Peak Hour Intersection Operation During Construction (Valley–Ivyglen Project)

No.	Intersection	AM				PM			
		Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?	Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?
Zone 4 Valley substation and Staging Area VIG2									
18	McCall Blvd at Menifee Road	D	D	D	No	C	C	D	No

Source: LLG 2016a

Key:

[bold text] sub-standard LOS,

kV kilovolt

LOS Level of Service

1

Table 4.15-12 Reduction in Road Capacity due to Temporary Lane Closure (Valley-Ivyglen Project)

Road	Existing Number of Lanes	Temporary Percent Reduction in Capacity (percent)	Associated Project Components
3rd Street, Lake Elsinore	2	50	VIG 3, VIG 4
Conrad Avenue, Lake Elsinore	2	50	VIG 3
Pasadena Avenue, Baker Street, Lake Elsinore	2	50	VIG 4
Lake Street, Lake Elsinore	2	50	VIG 5
Temescal Canyon Road, Lake Elsinore, Riverside County	2	50	VIG 5, VIG 7, VIG 8

2

Operation and Maintenance

4 Operational impacts would be negligible, as the proposed Valley–Ivyglen Project would require minimal
5 maintenance and would not require more than a few vehicles for operation and maintenance activities.
6 The proposed alignments follow existing alignments in many areas, so maintenance already occurs in
7 some areas of the alignment. The applicant inspects 115-kV subtransmission lines at least once per year
8 either by flying or driving the line routes. Emergency repairs to the 115-kV subtransmission lines may
9 occasionally be required. Routine maintenance activities for the substation and telecommunications
10 system would not be anticipated to require more than a few vehicles and, therefore, would have a less
11 than significant impact during operation of the project.

12

Mitigation Measure

14 **MM TT-1: Traffic Management and Control Plan.** The applicant shall prepare a Traffic Management
15 and Control Plan that shall include, at a minimum, measures to ensure that:

- 16
- 17 • Traffic flow, bicycle access, and pedestrian access is not completely restricted on any roadway
18 for longer than 15 minutes, or a detour is provided;
 - 19 • Emergency access is maintained at all times; and
 - 20 • Lane closures do not create safety hazards.

22 In addition to measures required by agencies with jurisdictions over the project, this plan will, at a
23 minimum:

- 24
- 25 • Include a discussion of work hours, haul routes, work area delineation, traffic control, and
26 flagging;
 - 27 • Identify all access and parking restriction and signage requirements;
 - 28 • Require workers to park personal vehicles at the approved staging area and take only necessary
29 project vehicles to the work sites;
 - 30 • Lay out plans for pre-construction notifications to and a process for communication with affected
31 residents and landowners. Advance public notification shall include posting of notices and
32 appropriate signage regarding construction activities. The written notification shall include the
33 construction schedule, the exact location and duration of activities within each street (i.e., which

- 1 roads/lanes and access point/driveways/parking areas would be blocked on which days and for
2 how long), and a toll-free telephone number for receiving questions or complaints;
- 3 • Require posting of warning signs so that motorists are prepared for slow trucks;
- 4 • Require notification of emergency service providers regarding the timing, location, and duration
5 of construction activities.
- 6 • Require all roads to remain passable to emergency service vehicles at all times;
- 7 • Identify all roadway locations where special construction techniques (e.g., night construction)
8 would be used to minimize impacts to traffic flow;
- 9 • Require emergency vehicle access to be maintained at all times;
- 10 • Encourage full use of the full roadway width that existed prior to construction during non-
11 working hours, if possible;
- 12 • Restrict deliveries of large equipment during peak traffic hours to the extent feasible in
13 accordance with applicable local ordinances;
- 14 • Ensure that traffic control is performed in accordance with final engineering plans and approved
15 drawings attached to any permit issued;
- 16 • When required, such as during egress of slow traffic onto public roadways, traffic shall be
17 controlled by flaggers who shall be in constant communication with each other during flagging
18 operations;
- 19 • Require removal of all dirt from the roadway each day before the completion of work; and
- 20 • Require streets to be maintained in drivable condition at all times.

22 The Traffic Management and Control Plan shall be submitted to the CPUC for review and approval at
23 least 60 days prior to the start of construction. Construction may not commence until CPUC has provided
24 the applicant with approval of the plan.

26 **Impact TT-2 (VIG): Conflict with an applicable congestion management program, including, but
27 not limited to level of service standards and travel demand measures, or
28 other standards established by the county congestion management agency
29 for designated roads or highways.**

30 *LESS THAN SIGNIFICANT WITH MITIGATION*

32 **Construction**

33 The analysis presented in this section focuses on the proposed project's compliance with the Riverside
34 County Congestion Management Program's (CMP's) minimum acceptable LOS of E. The approach for
35 analyzing impacts to CMP intersections is as described for Impact TT-1 (VIG). Results of the analysis
36 are shown in Table 4.15-13. The impacts of project-related construction traffic during the AM peak hour
37 (7:00 to 9:00 a.m.) and the PM peak hour (4:00 to 6:00 p.m.) were evaluated based on analysis of near-
38 term traffic conditions plus project construction traffic conditions at the 11 key CMP intersections.

Table 4.15-13 Peak Hour Congestion Management Program Intersection Operation During Construction (Valley-Ivyglen Project)

No.	Intersection	AM			PM			
		Existing LOS	LOS During Construction	Significant? ⁽¹⁾	Existing LOS	LOS During Construction	Significant? ⁽¹⁾	
115-kV Subtransmission Lines and Staging Areas								
Zone 1 Ivyglen Substation Staging Area and Zone 2 Staging Area VIG9								
3	Indian Truck Trail at I-15 Northbound Ramps	D	D	No	C	D	No	
4	Indian Truck Trail at I-15 Southbound Ramps	C	C	No	C	C	No	
Zone 2 Staging Area VIG9								
8	Lake St at I-15 Northbound Ramps	F	F	Yes	C	C	No	
9	Lake St at I-15 Southbound Ramps	C	C	No	D	D	No	
Zone 3 Staging Area VIG5, VIG6, VIG7, and VIG8								
11	Central Avenue (SR-74) at Rosetta Canyon Drive	C	C	No	B	B	No	
12	Central Avenue (SR-74) at I-15 Northbound Ramps	C	C	No	C	C	No	
13	Central Avenue (SR-74) at I-15 Southbound Ramps	C	C	No	D	D	No	
14	Central Avenue (SR-74) at Collier Avenue	D	D	No	D	D	No	

Table 4.15-13 Peak Hour Congestion Management Program Intersection Operation During Construction (Valley-Ivyglen Project)

No.	Intersection	AM			PM		
		Existing LOS	LOS During Construction	Significant? ⁽¹⁾	Existing LOS	LOS During Construction	Significant? ⁽¹⁾
Zone 4 Valley substation and Staging Area VIG2							
15	Menifee Road at Pinacate Rd (SR-74)	F	F	No ⁽²⁾	D	E	Yes
16	McCall Blvd at I-215 Southbound Ramps	D	D	No	C	D	No
17	McCall Blvd at I-215 Northbound Ramps	C	C	No	D	D	No

Source: LLG 2016a

Notes:

¹ See Table 8-1 in Appendix J-1

² No change in seconds of vehicle delay would occur

Key:

[bold text] sub-standard LOS,

Blvd Boulevard

kV kilovolt,

I-15 Interstate 15

I-215 Interstate 215

LOS Level of Service

SR-74 State Route 74

- 1
2 As demonstrated in Table 4.15-13, implementation of the proposed Valley-Ivyglen Project would cause
3 the Lake Street at I-15 Northbound Ramps and Menifee Road at Pinacate Rd (SR-74) intersections to
4 operate below the minimum acceptable LOS (LOS D). Impacts to LOS at these intersections would be
5 significant. MM TT-2 would require restriction of all heavy truck traffic related to the project at the Lake
6 Street and I-15 northbound ramp during the AM peak hour and construction traffic for the project at the
7 Menifee Road and SR-74 intersection during the PM peak hour. Implementation of MM TT-2 would
8 return the LOS at these intersections to existing condition levels. Impacts would be less than significant
9 with implementation of MM TT-2, since no intersections would operate below the minimum acceptable
10 CMP LOS as a result of the project.
11
12 Installation of the proposed Valley-Ivyglen 115-kV lines would also require roadway crossings during
13 installation of the proposed overhead lines, and temporary structure installation and wire stringing
14 activities would occur along CMP roadways I-15, I-215, and SR-74. These activities could temporarily
15 disrupt automobile traffic patterns and increase delays for vehicles. Closure of one lane of SR-74 would
16 reduce the road's capacity by 50 percent. This could result in a significant impact. MM TT-3 would
17 require preparation of a plan for scheduling closure of Caltrans-managed roadways as part of the required
18 encroachment permit. Impacts would be less than significant with mitigation.
19

1 ***Operation and Maintenance***

2 Operational impacts would be negligible as the proposed Valley–Ivyglen Project would require minimal
3 maintenance and would not require more than a few vehicles for operation and maintenance activities.
4 The proposed alignments follow existing alignments in many areas, so maintenance already occurs in
5 some areas of the alignment. The applicant inspects 115-kV subtransmission lines at least once per year
6 either by flying or driving the line routes. Emergency repairs to the 115-kV subtransmission lines may
7 occasionally be required. Routine maintenance activities for the substation and telecommunications
8 system would not be anticipated to require more than a few vehicles and, therefore, would have a less
9 than significant impact during operation of the project.

10 ***Mitigation Measures***

11 **MM TT-2: Heavy Vehicle Traffic Restrictions.** The applicant shall coordinate with Caltrans and the
12 City of Lake Elsinore to restrict heavy vehicle traffic for the project at the Lake Street and I-15
13 northbound ramp during the AM peak hour (7:00 AM to 9:00 AM) for the duration of project
14 construction. Heavy vehicles traveling to project sites during the AM peak hour shall be diverted to the
15 Indian Truck Trail and I-15 northbound ramp. Prior to the start of construction, the applicant shall alert
16 truck drivers associated with the project of this restriction and shall install temporary signage on Lake
17 Street notifying project drivers of this restriction.

18 The applicant shall also restrict construction traffic for the project at the Menifee Road and SR-74
19 intersection during the PM peak hour (4:00 PM to 6:00 PM). The applicant may require construction
20 traffic to exit Staging Area ASP7 and Staging Area VIG2 prior to 4:00 PM or after 6:00 PM.
21 Alternatively, the applicant may provide an alternative access route via Case Road to the Ethanac Road
22 and I-15 interchange.

23 **MM TT-3: Highway Closure Plan.** At least 30 days prior to initiating installation of crossings of I-15
24 and SR-74, the applicant shall prepare and submit to Caltrans a Highway Closure Plan as part of its
25 Caltrans encroachment permit application. The plan shall ensure that closure or partial closure of I-15
26 and SR-74 are planned so as to minimize traffic disruption and other hazards to highway users (e.g.,
27 construction limited to off-peak, non-daytime hours, from 10 p.m. to 5 a.m., and signage posted prior to
28 the closure to alert drivers of the closure in accordance with Caltrans requirements). Highway closure
29 times will be reviewed and approved by Caltrans to minimize delay to I-15 and SR-74 traffic. The plan
30 shall also outline suggested detours for I-15 and SR-74 traffic, including routes and signage. At least 15
31 days prior to initiating installation of the crossings, the applicant shall provide to the CPUC evidence of
32 Caltrans granting the encroachment permit.

33 **Impact TT-3 (VIG): Result in a change in air traffic patterns, including either an increase in
34 traffic levels or a change in location that results in substantial safety risks.**
35 *LESS THAN SIGNIFICANT WITH MITIGATION*

36 ***Construction***

37 ***Helicopter Operation***

38 Light-duty helicopters would be used for materials delivery, hardware installation, and wire stringing
39 along 115-kV Segments VIG1 and VIG4 to VIG7. Helicopter fueling, takeoff, and landing areas would
40 be limited to established helicopter landing areas (e.g., facilities at Skylark Field Airport) and areas in
41 proximity to wire stringing sites or access roads and previously disturbed areas near construction sites
42 within the 115-kV Valley–Ivyglen General Disturbance Area.

1 Helicopters would be used in accordance with the applicant's specifications, which are similar to the
2 methods detailed in Institute of Electrical and Electronic Engineers 951-1996 standard, *Guide to the*
3 *Assembly and Erection of Metal Transmission Structures*, Section 9, Helicopter Methods of
4 Construction. The applicant may need to submit a Congested Area Plan to the FAA 30 to 60 days prior to
5 start of construction for helicopter external-load operations over populated areas or areas congested with
6 structures or objects. The FAA requires that all pilots, crewmembers, and helicopters involved with
7 external-load operations (e.g., lattice steel tower erection and wire stringing) be certified pursuant to 14
8 CFR 133 (External-Load Operations). Pursuant to FAA and OSHA requirements, briefings must be
9 completed prior to each day of helicopter operation regarding the plan of operation for the pilot and all
10 ground personnel. Additionally, cargo hooks used for securing helicopter external loads must be tested
11 electrically and mechanically prior to each day of operation. Accidents and incidents associated with
12 helicopter use must be reported immediately to the National Transportation Safety Board. Flights in close
13 proximity to residences or congested areas may result in significant safety impacts. MM TT-4 would
14 require submittal of a Helicopter Lift Plan to the FAA prior to such operations. Implementation of MM-4
15 would reduce impacts on air traffic patterns to less than significant.

16

17 ***Height of Structures and Equipment***

18 The applicant would notify and consult with the FAA if any structure or equipment (e.g., crane) were to
19 exceed 200 feet in height or to exceed the imaginary slope extending from runways as described in 14
20 CFR 77 (see Section 4.15.2.1, "Federal"). Construction activities on the power lines and at the substation
21 may involve equipment that is over 200 feet in height, triggering FAA notification under 14 CFR 77.
22 115-kV Segments VIG 1 would be located approximately 1.5 miles north of the Perris Valley Airport.
23 Construction equipment approximately 80 feet tall located 1.5 miles from the Perris Valley Airport
24 would overlap with the Perris Valley Airport's imaginary slope; the slope would increase an additional
25 vertical foot for every additional 100 horizontal feet from the airport (up to 20,000 feet from the runway).
26 Structures exceeding this imaginary slope may pose a safety hazard to air traffic, which would be a
27 significant impact. MM TT-5, which would require SCE to obtain a no hazard determination from the
28 FAA when notification under 14 CFR 77 is required, would be implemented to reduce impacts to less
29 than significant.

30

31 ***Operation and Maintenance***

32 Proposed 115-kV Segments VIG 2 though VIG 8 would be less than 200 feet tall (Table 2-1 in Chapter 2,
33 "Project Description") and would not overlap with Perris Valley Airport's imaginary slope; therefore,
34 notification to and consultation with the FAA would not be required for these segments. Impacts from
35 115-kV Segments VIG 2 through VIG 8 would be less than significant.

36 115-kV Segment VIG 1 would be located approximately 1.5 miles from the Perris Valley Airport. Poles
37 approximately 80 feet tall located 1.5 miles from the Perris Valley Airport would overlap with the Perris
38 Valley Airport's imaginary slope; the slope increases an additional vertical foot for every additional 100
39 horizontal feet from the airport (up to 20,000 feet from the runway). The proximity of 115-kV Segment
40 VIG 1 to the Perris Valley Airport may result in a significant impact.

41 Prior to construction, the applicant would consult with the FAA and ensure the filing of forms and
42 associated specifications per the requirements of Federal Aviation Regulations Part 77, Objects Affecting
43 Navigable Airspace (Project Commitment G). Impacts would still be significant because Project
44 Commitment G does not require that the applicant implement any measures to reduce hazards. MM TT-5
45 would be implemented to reduce airspace hazards from encroachment of structures. Impacts from 115-kV
46 Segments VIG 1 would be less than significant with mitigation.

47

1 Helicopters would be used to inspect transmission and subtransmission lines once per year and would not
2 be expected to impact air traffic. Flights in close proximity to residences or congested areas may result in
3 significant safety impacts. MM TT-4 would require submittal of a Helicopter Lift Plan to the FAA prior
4 to such operations. Impacts would be less than significant with mitigation.

5

6 **Mitigation Measures**

7 **MM TT-4: Helicopter Lift Plan.** SCE's helicopter contractor shall coordinate with the FAA and obtain
8 FAA-required approvals for helicopter operations. The applicant contractor's submittal to the FAA shall
9 include a Helicopter Lift Plan for operations within 1,500 feet of a congested area or within 1,500 feet of
10 residences in compliance with 14 CFR 133.33, which requires that flights be conducted so emergency
11 landings and release of external load can be accomplished without safety risks to people or property
12 when operating over congested areas. The Helicopter Lift Plan shall include the following measures, to
13 the extent feasible:

- 14
- 15 • Designation of a responsible party for equipment inspections;
 - 16 • Communication procedures;
 - 17 • Identification of exclusion zones where pedestrians will not be allowed; and
 - 18 • Training of personnel in safety requirements and procedures.

19

20 The Helicopter Lift Plan and evidence of FAA approval of the plan shall be provided to the CPUC prior
21 to commencing helicopter operations.

22

23 **MM TT-5. FAA No-Hazard Determination.** SCE shall obtain a determination of no hazard from the
24 FAA when notification under 14 CFR 77 is required for:

- 25
- 26 • Use of construction equipment, such as cranes; or
 - 27 • Installation of structures, such as lattice steel towers.

28

29 SCE shall provide documentation of the FAA finding to the CPUC prior to the use of equipment or
30 installation of structures that require notification under 14 CFR 77.

31

32 **Impact TT-4 (VIG): Substantially increase hazards due to a design feature (e.g., sharp curves or
dangerous intersections) or incompatible uses (e.g., farm equipment).**

33 *LESS THAN SIGNIFICANT WITH MITIGATION*

34

35 **Construction**

36

37 **Access Roads**

38 Most of the access roads constructed to accommodate construction of the proposed project would be left
39 in place for maintenance access and are not expected to be accessible to the public. Roads would be
40 designed to avoid hazardous features for the safety of operation and maintenance crews, as described in
41 Section 2.4.5.1 ("Access Road Construction"). Impacts would be less than significant.

42

43 **Road Damage**

44 Construction of the proposed project would require the use of overweight or oversized vehicles for the
45 delivery of construction equipment and materials. Oversized vehicles can shorten the life pavement and

1 eventually lead to rutting and cracking. MM TT-6 would require that SCE repair road damage caused
2 directly as a result of project vehicle traffic and activities.

3

4 **Work in Roadways**

5 Installation of the proposed Valley–Ivyglen Project 115-kV lines would require roadway crossings during
6 installation of the proposed overhead lines, and temporary guard structure installation and wire stringing
7 activities would occur along roadways. These activities could temporarily cause safety impacts to
8 motorists, bicyclists, and pedestrians. Prior to stringing conductor across roads, the applicant would
9 ensure that safety devices such as traveling grounds, guard structures, and radio-equipped roving, public
10 safety vehicles, and linemen would be in place prior to the initiation of wire-stringing activities.
11 Additionally, as described in Section 2.4.5.6, “Wire Stringing,” one or more of the following methods
12 would be employed to protect the public: erection of a highway net and guard structure system to prevent
13 a conductor from falling into traffic; detour of all traffic off a highway at the crossing position;
14 implementation of a controlled continuous traffic break while stringing operations are performed; or
15 strategic placement of special line trucks with extension booms on the highway deck. Depending on the
16 permitting agency, the use of a secondary safety take-out sling at highway crossings may be required.
17 Safety impacts may be significant depending on how these measures are implemented. MM TT-1 would
18 require development of a Traffic Management and Control Plan prior to commencement of construction
19 activities to reduce potential safety hazards. Impacts would be less than significant with mitigation.

20

21 **Operation and Maintenance**

22 Project operation would not require construction of roads or driveways. SCE would adhere to safety
23 precautions if any line stringing is needed for repairs. Some slow trucks may exit from the substation site,
24 but the volume of trucks would be negligible. Heavy truck traffic would be limited such that it would not
25 cause a noticeable acceleration in pavement degradation. Safety impacts would be less than significant.

26

27 **Mitigation Measure**

28 **MM TT-1: Traffic Management and Control Plan.**

29

30 **MM TT-6: Road Damage Repair.** SCE shall restore and repair to pre-project conditions any roads
31 damaged by project vehicle traffic. SCE shall document roadway conditions with photographs prior to
32 the project along roads identified for heavy vehicle use in the project’s Traffic Impact Analysis. SCE
33 shall also take photographs after the project and after completion of any repairs to document restoration
34 of pre-project pavement conditions.

35

36 **Impact TT-5 (VIG): Result in inadequate emergency access.**
37 *LESS THAN SIGNIFICANT WITH MITIGATION*

38

39 **Construction**

40 Places where the components of the proposed Valley Ivyglen Project span a road or require a lane closure
41 may result in impeded emergency access along those roadways. This would be a significant impact. MM
42 TT-7 would require coordination with local emergency service providers so that they can
43 anticipate road closures. Impacts would be less than significant with mitigation.

44

45 **Operation and Maintenance**

46 The project would not result in the permanent closure of any roads or lanes, and no temporary road or
47 lane closures are planned during operations. Maintenance activities that would occur outside access roads

1 or structure pads or require disturbance of public roadways would be infrequent. However, any such
2 activities would be coordinated with local jurisdictions, and access for emergency vehicles would be
3 maintained as required under MM TT-7. Impacts would be less than significant with mitigation.
4

5 **Mitigation Measure**

6 **MM TT-7: Emergency Service Provider Notification.** SCE shall notify local emergency service
7 providers (i.e., police departments, ambulance services, and fire departments) of road closures at least
8 one week prior to the closure. SCE shall notify the provider of the location, date, time, and duration of
9 closure. SCE shall also coordinate with local emergency service providers to ensure emergency vehicle
10 access at all times during construction by, for example, keeping metal plates available to cover open
11 trenches.

12 **Impact TT-6 (VIG): Conflict with adopted policies, plans, or programs regarding public transit,
13 bikeways, or pedestrian facilities, or otherwise substantially decrease the
14 performance or safety of such facilities.**

15 *LESS THAN SIGNIFICANT WITH MITIGATION*

16 **Construction**

17 Construction activities and construction traffic would take place on roads that are also used by public
18 transit routes, bicyclists (including on designated bike lanes), and pedestrians. Public transit, pedestrian,
19 and bicycle circulation may temporarily be affected by construction activities, including utility pole
20 installation and wire stringing. Temporary impacts may also occur in or near residential areas where
21 roads that may be used by pedestrians or bicyclists would be temporarily blocked during construction.
22

23 Bikeway and trail segments would parallel some of the proposed Valley–Ivyglen 115-kV Segments.
24 115-kV Segments VIG2 to VIG4 would cross a Class II Bike Route. 115-kV Segments VIG1, VIG2,
25 VIG5, CIG 7, and VIG 8 would cross a County Combination Trail. 115-kV Segment VIG1 would also
26 cross County Regional Trail. 115-kV Segment VIG4 would cross the Lake Elsinore Lake, River, Levee
27 Regional Trail. 115-kV Segment VIG5 would also cross the Lake Elsinore Regional Trail, Lake Elsinore
28 Lake, River, Levee Regional Trail, and Lake Elsinore Historic Trail. 115-kV Segment VIG 8 would also
29 cross a County Regional Trail and Community Trail.
30

31 Construction activities are not expected to impede pedestrian or bicyclist movement such that no suitable
32 alternative routes would be available. Effects would occur for a relatively short period at any one
33 location as utility structures are installed incrementally along the proposed routes. As previously
34 discussed, work near roadways could, however, result in a safety hazard for bicyclists and pedestrians.
35 MM TT-1 would require development of a Traffic Management and Control Plan prior to
36 commencement of construction activities to reduce potential safety hazards. Impacts would be less than
37 significant with mitigation.
38

39 Several bus routes parallel the proposed Valley–Ivyglen 115-kV segments (Table 4.15-1). Staging of
40 equipment during construction may require the temporary closure of existing bus stops along SR 74. Bus
41 stop closure would be a temporary condition and would not conflict with adopted policies, plans, or
42 programs regarding public transit or otherwise substantially decrease the performance or safety of such
43 facilities. Therefore, impacts under this criterion would be less than significant.
44

Operation and Maintenance

Operational impacts would be negligible because the proposed project would not result in the permanent closure of bicycle, pedestrian, or public transit facilities. Inspection activities for the transmission and subtransmission lines would occur on a yearly basis. Routine maintenance activities for the substation and telecommunications system would not be anticipated to require more than a few vehicles and, therefore, would have a less than significant impact during operation of the project.

Mitigation Measure

MM TT-1: Traffic Management and Control Plan.

Impact TT-7 (VIG): Result in inadequate parking that would result in a significant impact on the environment
LESS THAN SIGNIFICANT

Construction

Construction of project components would not require on-street parking. On-site vehicle parking for construction workers and construction equipment would be accommodated within staging areas or the ROW for the transmission, subtransmission, distribution, and telecommunications. Installation of the proposed Valley–Ivyglen Project 115-kV lines would require roadway crossings and wire stringing activities along roadways that may require lane closures that could temporarily limit on-street parking in Riverside County and the city of Lake Elsinore. On street parking impacts would be limited in scope, such that no significant environmental impacts would occur.

Operation and Maintenance

The proposed project would not result in any impacts to parking during operation. Construction of the project would not result in the permanent removal of any on-street parking spaces. Maintenance activities that would occur outside access roads or structure pads or that would require disturbance of public roadways would be infrequent and temporary such that parking impacts would be negligible. There would be a less than significant impact to parking.

4.15.5 Environmental Impacts and Mitigation Measures (Alberhill Project)

4.15.5.1 Project Commitments (Alberhill Project)

The applicant has committed to the following as part of the design of the proposed Alberhill Project. See Section 2.6, "Project Commitments," for a complete description of each project commitment.

- **Project Commitment B: Worker Environmental Awareness Plan.** Prior to construction of the proposed projects, a Worker Environmental Awareness Plan would be developed based on final engineering designs, the results of preconstruction surveys, project commitments, and mitigation measures imposed by the California Public Utilities Commission. A presentation would be prepared by the applicant and shown to all site workers prior to their start of work. A record of all trained personnel would be kept with the construction foreman. In addition to the instruction for compliance with any site-specific biological or cultural resource protective measures and project mitigation measures, all construction personnel would also receive the following:
 - A list of phone numbers of the applicant's personnel with the (archeologist, biologist, environmental coordinator, and regional spill response coordinator);

- 1 - Instruction on the South Coast Air Quality Management District Rule 403 for control of dust;
- 2 - Instruction on what typical cultural resources look like, and if discovered during
- 3 construction, to suspend work in the vicinity of any find and contact the site foreman and
- 4 archeologist or environmental coordinator;
- 5 - Instruction on individual responsibilities under the Clean Water Act, the Storm Water
- 6 Pollution Prevention Plan for the projects, site-specific Best Management Practices, and the
- 7 location of Material Safety Data Sheets for the projects;
- 8 - Instructions to notify the foreman and regional spill response coordinator in case of
- 9 hazardous materials spills and leaks from equipment or upon the discovery of soil or
- 10 groundwater contamination;
- 11 - A copy of the truck routes to be used for material delivery; and
- 12 - Instruction that noncompliance with any laws, rules, regulations, or mitigation measures
- 13 could result in being barred from participating in any remaining construction activities
- 14 associated with the projects.
- 15 • **Project Commitment G: Aircraft Flight Path Safety Provisions and Consultations.** Prior to
- 16 construction, the applicant shall consult with the Federal Aviation Administration and ensure the
- 17 filing of forms and associated specifications per the requirements of Federal Aviation
- 18 Regulations Part 77 (Objects Affecting Navigable Airspace). The applicant shall review all
- 19 recommendations and/or determinations from the FAA and mark and/or light the FAA
- 20 recommended components where the applicant finds they are reasonable and feasible.
- 21 • **Project Commitment H: Noise Control.** The applicant shall implement the following noise
- 22 control measures for the proposed projects:
- 23 - All construction and general maintenance activities, except in an emergency, shall be limited
- 24 to the hours of 7 a.m. to 7 p.m. and prohibited on Sundays and all legally proclaimed
- 25 holidays. SCE will obtain all relevant ministerial or non-discretionary noise permits from
- 26 local jurisdictions. In the event that construction activities are necessary on days or hours
- 27 outside of what is specified by the local ordinance, SCE would provide five-day advanced
- 28 notification, including a general description of the work to be performed, location and hours
- 29 of construction anticipated, to the CPUC, the local jurisdiction, and residents within 300 feet
- 30 of the anticipated work, as well route all construction traffic away from residences, schools
- 31 and recreational facilities to the extent feasible.
- 32 - Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds)
- 33 that are no less effective than those originally installed by the manufacturer.
- 34 - Construction traffic shall be routed away from residences and schools, where feasible.
- 35 - Unnecessary construction vehicle use and idling time shall be minimized to the extent
- 36 feasible. The ability to limit construction vehicle idling time is dependent upon the sequence
- 37 of construction activities and when and where vehicles are needed or staged. A "common
- 38 sense" approach to vehicle use shall be applied: if a vehicle is not required for use
- 39 immediately or continuously for construction activities, its engine should be shut off. Note:
- 40 certain equipment, such as large diesel-powered vehicles require extended idling for warm-
- 41 up and repetitive construction tasks.
- 42 - The applicant will notify all receptors within 500 feet of construction of the potential to
- 43 experience significant noise levels during construction.

- During construction, the applicant will use a temporary noise barrier that blocks the line of sight between the construction area and the residence areas where sensitive receptors would be subjected to significant noise impacts.
- The applicant would shield small stationary equipment with portable barriers within 100 feet of residences, where feasible.
- The applicant would minimize engine idling and turn off engines when not in use.
- Where blasting is required for the Alberhill system Project, the applicant would conduct additional pre-blast notification and coordination with residents, utilities, and others that may be affected by blasting operations.

4.15.5.2 Impacts Analysis (Alberhill Project)

Impact TT-1 (ASP): Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

LESS THAN SIGNIFICANT WITH MITIGATION

The analysis presented in this section focuses on the LOS based on the evaluation presented in the traffic impact analysis of existing conditions plus project build-out conditions as described in the methodology section above. Impacts that may occur on public transit, bikeways, or pedestrian facilities are discussed under Impact TT-6 (ASP). Impacts to CMP intersections are discussed under Impact TT-2 (ASP).

Construction

Traffic impacts related to construction of the proposed 115-kV subtransmission line segments, 500-kV transmission lines, Alberhill Substation, and telecommunication infrastructure would be comparable in most cases and are discussed together except where impacts would be specific to a particular component of the proposed Alberhill Project. Construction of the proposed Alberhill Project would result in a temporary increase in traffic volumes on the regional and local roadways that provide access to the construction areas. A temporary increase in traffic is also expected during construction of the proposed Alberhill Substation, the site of which would also serve as one of the primary staging areas for the proposed Alberhill Project. Traffic would be generated by construction worker commute trips and material deliveries. Hauling materials, such as poles, concrete, conductor, excavation spoils, and removed poles, would temporarily increase existing traffic volumes along the proposed 115-kV subtransmission line segments.

The applicant estimates that, during the 28-month construction period, the daily workforce would include as many as 200 workers on a peak day of construction (i.e., if multiple components of the proposed Alberhill Project were being constructed simultaneously). The Alberhill Substation site would be used as a reporting location for workers, vehicle and equipment parking, and material storage. It is anticipated that most personnel would drive to a staging area at the beginning of each workday and depart from the staging area at the end of the day (7:00 a.m. to 7:00 p.m., Monday through Saturday; Project Commitment H). Throughout the day, some personnel would travel between staging areas and worksites (Figures 2-2a to 2-2i). Throughout the construction period, material delivery to staging areas would vary. As stated in Chapter 2 (“Project Description”) delivery activities requiring extensive street use would be

1 scheduled to occur during the off-peak hours to the extent feasible and in accordance with applicable
2 local ordinances. Since construction of the various project components would occur over a dispersed
3 area, different local roads along the route would be impacted at different times during construction.
4

5 Construction trip generation estimates for the proposed Alberhill Project are presented in Table 4.15-14
6 for Import Soil Option 2. With implementation of Soil Import Option 1, soil would be obtained from an
7 import area immediately adjacent to the proposed substation site. Soil borrow trucks would not use
8 public streets for the hauling activities. Therefore, this option would not add trips to the local street
9 system beyond those included in Table 4.15-14, and trips generated in Zone 4 would not occur. The
10 analysis assumes that construction in each zone would occur concurrently and would require the
11 maximum number of construction workers and heavy vehicles. However, as stated above, the applicant
12 assumes a maximum number of 200 construction workers on a peak day of construction; therefore, peak
13 day construction trip generation for the project is expected to be similar to construction trips for Zone 1.
14

Table 4.15-14 Construction Trip Generation (Alberhill Project)

Project Component	Vehicles Per Day	PCE Factor	Passenger Car Equivalent Trips		
			Daily Trips	AM Peak Hour	PM Peak Hour
Zone 1 Alberhill Substation					
Construction Worker Vehicle	100	1.0	200	0 ⁽¹⁾	100
Heavy Vehicles	93	2.5	465	93	93
<i>Subtotal</i>	193		665	93	193
Zone 1 Staging Area					
Construction Worker Vehicles	100	1.0	200	0 ⁽¹⁾	100
Heavy Vehicles	40	2.5	200	40	40
<i>Subtotal</i>	145		400	40	140
Zones 2 and 3 Staging Areas					
Construction Worker Vehicles	45	1.0	90	0 ⁽¹⁾	45
Heavy Vehicles	40	2.5	200	40	40
<i>Subtotal</i>	85		290	40	85
Zone 4 Quarry					
Construction Worker Vehicles	10	1.0	20	0 ⁽¹⁾	10
Heavy Vehicles	72	2.5	360	72	72
<i>Subtotal</i>	82		380	72	82

Source: LLG 2016a

Notes:

⁽¹⁾ Construction workers assumed to arrive before the AM peak hour (defined as 7:00 to 9:00 a.m.) and leave during the PM peak hour (defined as 4:00 to 6:00 p.m.).

Key:

PCE Passenger Car Equivalent

15
16 Acceptable roadway LOS ranges from LOS C to LOC E depending on the jurisdiction. The impacts of
17 project-related construction traffic during the AM peak hour (7:00 to 9:00 a.m.) and the PM peak hour
18 (4:00 to 6:00 p.m.) were evaluated based on analysis of existing traffic conditions plus project build out
19 traffic conditions at the 12 key intersections. Results are shown in Table 4.15-15.

1

Table 4.15-15 Peak Hour Intersection Operation During Construction (Alberhill Project)

No.	Intersection	AM				PM			
		Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?	Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?
Zone 1 Alberhill Substation and 500-kV Transmission Lines									
1	Indian Truck Trail at Temescal Canyon Road	D	D	D	No	D	D	D	No
4	Campbell Ranch Road/De Palma Road at Indian Truck Trail	D	D	D	No	D	D	D	No
5	Horsethief Canyon Road at Temescal Canyon Road	B	B	C	No	B	C	C	No
6	Horsethief Canyon Road at De Palma Road	A	A	C	No	B	B	C	No
7	Concordia Ranch Road at Temescal Canyon Road	A	A	C	No	A	B	C	No
10	Lake Street at Temescal Canyon Road	A	A	D	No	B	C	D	No

Table 4.15-15 Peak Hour Intersection Operation During Construction (Alberhill Project)

No.	Intersection	AM				PM			
		Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?	Near-Term LOS	LOS During Construction	Acceptable LOS	Significant?
Zone 2 115-kV Subtransmission Lines and Staging Areas									
13	Diamond Drive at Lakeshore Drive/Mission Trail	D	D	D	No	D	D	D	No
14	Mission Trail at Lemon Street	A	A	D	No	A	A	D	No
15	Mission Trail at Bundy Canyon Road	B	B	D	No	B	B	D	No
Zone 3 115-kV Subtransmission Lines and Confirmed Staging Area									
22	McCall Blvd at Menifee Road	D	D	D	No	C	C	D	No
Zone 4 Corona Quarry (Corona Rock and Asphalt)									
25	El Camino Avenue/Downs Way at Magnolia Avenue	D	D	D	No	C	D	D	No
26	Sherborn Street at Magnolia Avenue	B	B	D	No	C	C	D	No

Source: LLG 2016b

Key

KV kilovolt,

LOS Level of Service

1 As demonstrated in Table 4.15-15, no intersection LOS would be significantly impacted as a result of
 2 construction of the proposed Alberhill Project. Impacts would be less than significant, and no mitigation
 3 would be required.
 4
 5 Installation of the proposed Alberhill Project 115-kV lines would also require roadway crossings during
 6 installation of the proposed overhead lines, and temporary structure installation and wire stringing
 7 activities would occur along roadways, as described in Section 2.4.4.4, “Traffic Control and Lane
 8 Closure.” Roadways with potential temporary lane closures along with reduction in traffic capacity is
 9 presented in Table 4.15-16. Installation of these segments would require temporary lane closures between
 10 two and four days. Underground conduits for telecommunication lines and relocation of the Elsinore
 11 Valley Municipal Water District pipeline would also require temporary lane or road closures. These
 12 activities would reduce the traffic capacity of the roadways by 17 to 50 percent and could temporarily
 13 disrupt automobile traffic patterns. This could result in a significant impact. MM TT-1 would require
 14 development of a Traffic Management and Control Plan. Impacts would be less than significant with
 15 mitigation.
 16
 17

Table 4.15-16 Reduction in Road Capacity due to Temporary Lane Closure (Alberhill Project)

Road	Existing Number of Lanes	Temporary Percent Reduction in Capacity	Associated Project Components
Temescal Canyon Road	2	50	ASP 1, ASP 1.5, ASP 2
Lake Street, Nichols Road, Baker Street, 3rd Street	2	50	ASP 2
Pasadena Street	2 to 3	33 to 50	ASP 2
Collier Avenue	2 to 3	33 to 50	ASP 3
East Hill Street, Pottery Street, Avenue 6, Malaga Road	2	50	ASP 4
Auto Center Drive, Casino Drive	2 to 4	25 to 50	ASP 4
Mission Trail	4 to 6	17 to 25	ASP 4
Waite Street, Almond Street, Lemon Street, Lost Road, Beverly Street, Bundy Canyon Road	2	50	ASP 5
Murrieta Road	2 to 4	25 to 50	ASP 6, ASP 7
Concordia Ranch Road	2	50	Elsinore Valley Municipal Water District pipeline

18
 19 **Operation and Maintenance**
 20 Operational impacts would be negligible because the proposed Alberhill Substation would be unstaffed.
 21 Inspection activities for the transmission and subtransmission lines would occur on a yearly basis.
 22 Routine maintenance activities for the substation and telecommunications system would not be
 23 anticipated to require more than a few vehicles and, therefore, would have a less than significant impact
 24 during operation of the project.
 25

26 **Mitigation Measure**

27 **MM TT-1: Traffic Management and Control Plan.**

28

- 1 **Impact TT-2 (ASP):** Conflict with an applicable congestion management program, including, but
 2 not limited to level of service standards and travel demand measures, or
 3 other standards established by the county congestion management agency
 4 for designated roads or highways.
 5 *LESS THAN SIGNIFICANT WITH MITIGATION*

6 ***Construction***

7 The analysis presented in this section focuses on the LOS based on the Riverside County CMP's
 8 minimum acceptable LOS E. The approach for analyzing impacts to CMP intersections is as described
 9 for Impact TT-1 (VIG). Results of the analysis are shown in Table 4.15-17. The impacts of project-
 10 related construction traffic during the AM peak hour (7:00 to 9:00 a.m.) and the PM peak hour (4:00 to
 11 6:00 p.m.) were evaluated based on analysis of near-term traffic conditions plus project construction
 12 traffic conditions at the 14 key CMP intersections.

Table 4.15-17 Peak Hour Congestion Management Program Intersection Operation During Construction (Alberhill Project)

No.	Intersection	AM			PM		
		Existing LOS	LOS During Construction	Significant? ⁽²⁾	Existing LOS	LOS During Construction	Significant? ⁽²⁾
Zone 1 Alberhill Substation and 500-kV Transmission Lines							
2	Indian Truck Trail at I-15 Northbound Ramps	D	D	No	C	D	No
3	Indian Truck Trail at I-15 Southbound Ramps	C	C	No	C	C	No
8	Lake Street at I-15 Northbound Ramps	F	F	Yes	C	C	No
9	Lake Street at I-15 Southbound Ramps	C	C	No	D	D	No
Zone 2 115-kV Subtransmission Lines and Staging Areas							
11	I-15 Northbound Ramps at Railroad Canyon Road	C	C	No	C	C	No

Table 4.15-17 Peak Hour Congestion Management Program Intersection Operation During Construction (Alberhill Project)

No.	Intersection	AM			PM		
		Existing LOS	LOS During Construction	Significant? ⁽²⁾	Existing LOS	LOS During Construction	Significant? ⁽²⁾
12	I-15 Southbound Ramps at Diamond Drive	D	D	No	D	D	No
16	I-15 Southbound Ramps at Bundy Canyon Road	C	C	No	C	C	No
17	I-15 Northbound Ramps at Bundy Canyon Road	C	C	No	D	D	No
Zone 3 115-kV Subtransmission Lines and Confirmed Staging Area							
18	I-215 Northbound Ramps at Matthews Road (SR-74)	A	A	No	A	A	No
19	Menifee Road at Pinacate Road (SR-74)	F	F	No ⁽¹⁾	D	E	Yes
20	McCall Blvd at I-215 Southbound Ramps	D	D	No	D	D	No
21	McCall Blvd at I-215 Northbound Ramps	C	C	No	D	D	No
Zone 4 Corona Quarry (Corona Rock and Asphalt)							
23	I-15 Southbound Ramps at Magnolia Avenue	D	D	No	D	D	No

Table 4.15-17 Peak Hour Congestion Management Program Intersection Operation During Construction (Alberhill Project)

No.	Intersection	AM			PM		
		Existing LOS	LOS During Construction	Significant? ⁽²⁾	Existing LOS	LOS During Construction	Significant? ⁽²⁾
24	I-15 Northbound Ramps at Magnolia Avenue	C	C	No	C	C	No

Source: LLG 2016b

Notes:

⁽¹⁾ No change in seconds of vehicle delay would occur.

⁽²⁾ See Table 8-1 in Appendix J-2.

Key:

[bold text] sub-standard LOS

kV kilovolt

I-15 Interstate 15

I-215 Interstate 215

LOS Level of Service

SR-74 state route

- 1 As demonstrated in Table 4.15-17, implementation of the proposed Alberhill Project would cause the intersection of Lake Street at the I-15 Northbound Ramps and Menifee Road at Pinacate Rd (SR-74) intersections to operate below the minimum acceptable LOS (LOSD).
- 2 Impacts to LOS at these intersections would be significant. MM TT-2 would require the applicant to avoid use of the Lake Street and I-15 northbound ramp for all heavy truck traffic during the AM peak hour and construction traffic for the project at the Menifee Road and SR-74 intersection during the PM peak hour. Implementation of MM TT-2 would return the LOS at these intersections to existing condition levels. Impacts would be less than significant with mitigation, since no intersections would operate below the minimum acceptable CMP LOS as a result of the project.
- 3 Installation of the proposed Alberhill Project 115-kV lines would also require roadway crossings during installation of the proposed overhead lines and temporary structure installation and wire stringing activities would occur along CMP roadways I-15 and SR-74. These activities could temporarily disrupt automobile traffic patterns and increase delays for vehicles. Closure of one lane of SR-74 would reduce the road's capacity by 50 percent. This could result in a significant impact. MM TT-3 would require preparation of a plan to schedule closure of Caltrans-managed roadways. Impacts would be less than significant with mitigation.
- 4 **Operation and Maintenance**
- 5 Operational impacts would be negligible because the proposed Alberhill Substation would be unstaffed. Inspection activities for the transmission and subtransmission lines would occur on a yearly basis.
- 6 Routine maintenance activities for the substation and telecommunications system would not be anticipated to require more than a few vehicles and, therefore, would have a less than significant impact during operation of the project.

1 **Mitigation Measures**

2 **MM TT-2: Heavy Vehicle Traffic Restrictions.**

4 **MM TT-3: Highway Closure Plan.**

6 **Impact TT-3 (ASP): Result in a change in air traffic patterns, including either an increase in**
7 **traffic levels or a change in location that results in substantial safety risks.**
8 *LESS THAN SIGNIFICANT WITH MITIGATION*

10 **Construction**

11 *Helicopter Operation*

12 Helicopters would be used for construction work associated with footings, assembly, and erection of 500-kV structures that are inaccessible from access roads. Helicopters would be used for wire stringing activities along all sections of the 500-kV transmission line routes and one section of 115-kV Segment ASP5 between Lost Road and Bundy Canyon Road (Appendix J-2; Figure 7-6). Helicopter fueling, takeoff, and landing areas would be limited to established helicopter landing areas (e.g., facilities at Skylark Field Airport), the proposed Alberhill Substation site, Staging Area ASP1, or Staging Area ASP3 (Figure 2-2a to 2-2i). During stringing activities, the helicopter would take off and land adjacent to pull sites along the 500-kV transmission line routes (including Staging Area ASP2). Staging Areas ASP4 through ASP7 would not be accessed by helicopter. There would be more helicopter use if SCE uses the helicopter construction approach instead of the conventional method of construction for the 500-kV transmission lines.

24 Helicopters would be used in accordance with the applicant's specifications, which are similar to the methods detailed in Institute of Electrical and Electronic Engineers 951-1996 standard, *Guide to the Assembly and Erection of Metal Transmission Structures*, Section 9, Helicopter Methods of Construction. The applicant may need to submit a Congested Area Plan to the FAA 30 to 60 days prior to start of construction for helicopter external-load operations over populated areas or areas congested with structures or objects. The FAA requires that all pilots, crewmembers, and helicopters involved with external-load operations (e.g., lattice steel tower erection and wire stringing) be certified pursuant to 14 CFR 133 (External-Load Operations). Pursuant to FAA and OSHA requirements, briefings must be completed prior to each day of helicopter operation regarding the plan of operation for the pilot and all ground personnel. Additionally, cargo hooks used for securing helicopter external loads must be tested electrically and mechanically prior to each day of operation. Accidents and incidents associated with helicopter use must be reported immediately to the National Transportation Safety Board. Flights in close proximity to residences or congested areas may result in significant safety impacts. MM TT-4 would require submittal of a Helicopter Lift Plan to the FAA prior to such operations. Implementation of MM-4 would reduce impacts on air traffic patterns to less than significant.

40 *Height of Structures and Equipment*

41 The applicant would notify and consult with the FAA if any structure or equipment (e.g., crane) were to exceed 200 feet in height or to exceed the imaginary slope extending from runways as described in 14 CFR 77 (see Section 4.15.2.1, "Federal").

1 Construction activities on the power lines and at the substation may involve equipment that is over 200
2 feet in height, triggering FAA notification under 14 CFR 77. 115-kV Segments ASP 4 and ASP 5 would
3 be located approximately 1,000 feet of the Skylark Field Airport.

4
5 Construction equipment greater than 20 feet tall located approximately 1,000 feet from the Skylark Field
6 Airport runway would overlap with the Skylark Field Airport's imaginary slope; the slope increases an
7 additional vertical foot for every additional 50 horizontal feet from the runway (up to 10,000 feet from
8 the runway). Equipment exceeding this imaginary slope may pose a safety hazard to air traffic, which
9 would be a significant impact. MM TT-5, which would require SCE to obtain a no hazard determination
10 from the FAA when notification under 14 CFR 77 is required, would be implemented to reduce impacts
11 to less than significant.

12
13 ***Operation and Maintenance***

14 Proposed 115-kV Segments ASP1 though ASP3, ASP6, and ASP7 would be less than 200 feet tall (Table
15 2-2 in Chapter 2, "Project Description") and would not overlap with Skylark Field Airport's imaginary
16 slope; therefore, notification and consultation with the FAA would not be required for these segments.
17 Impacts from 115-kV Segments ASP1 though ASP3, ASP6, and ASP7 would be less than significant.

18
19 115-kV Segments ASP 4 and ASP 5 would be located approximately 1,000 (feet from the Skylark
20 Field Airport. Poles greater than 20 feet tall located approximately 1,000 feet from the Skylark Field
21 Airport would overlap with the Skylark Field Airport's imaginary slope; the slope increases an
22 additional vertical foot for every additional 50 horizontal feet from the airport (up to 10,000 feet from the
23 runway).

24
25 Prior to construction, the applicant would consult with the FAA and ensure the required forms are filed
26 and applicable requirements under Federal Aviation Regulations Part 77, Objects Affecting Navigable
27 Airspace (Project Commitment G) are met. Impacts would still be significant because Project
28 Commitment G does not require that the applicant implement any measures to reduce hazards. MM TT-5
29 would be implemented to reduce airspace hazards from encroachment of structures. Impacts would be
30 less than significant with mitigation.

31
32 Helicopters would be used to inspect transmission and subtransmission lines once per year and would not
33 be expected to impact air traffic. Flights in close proximity to residences or congested areas may result in
34 significant safety impacts. MM TT-4 would require submittal of a Helicopter Lift Plan to the FAA prior
35 to such operations. Impacts would be less than significant with mitigation.

36
37 ***Mitigation Measures***

38 **Mitigation Measure TT-4: Helicopter Lift Plan**

39
40 **Mitigation Measure TT-5. FAA No-Hazard Determination.**

41

Impact TT-4 (ASP): Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Access Roads

Most of the access roads constructed to accommodate construction of the proposed project would be left in place for maintenance access and are not expected to be accessible to the public. Love Lane would be relocated 130 to 180 feet west of its existing location. The relocated section of road would be paved, 36 feet wide, and extend approximately 250 feet north of Temescal Canyon Road. To the north, the section of relocated road would be unpaved and join the existing, unpaved Love Lane, approximately 400 feet north of the proposed substation access driveway. Construction of the relocated road would take place prior to closing the existing segments. Roads would be designed to avoid hazardous features for the safety of operation and maintenance crews, as described in Section 2.4.5.1 “Access Road Construction.” The relocated Love Lane design would be approved by Riverside County. Impacts would be less than significant.

Driveway

To provide access to the substation site during substation construction activities, the applicant would construct a new 30-foot-wide driveway off of Temescal Canyon Road to the east of the relocated Love Lane. Additional driveways would be located within the substation site and would be between 30 and 45 feet wide. Safety issues may occur as large, slow trucks enter and exit the substation site into faster traffic on Temescal Canyon Road. In addition, trucks accessing staging areas could result in similar safety issues. This could cause significant hazards impacts. MM TT-1 would require posting warning signs so that motorists can be prepared for slow trucks. Impacts would be less than significant with the implementation of MM TT-1.

Road Damage

Construction of the proposed project would require the use of overweight or oversized vehicles for the delivery of construction equipment and materials. Oversized vehicles can shorten the life of the pavement and eventually lead to rutting and cracking. Damage to the roadway would result in a significant impact. MM TT-6 would require that SCE repair road damage caused directly as a result of project vehicle traffic and activities.

Work in Roadways

Installation of the proposed Alberhill Project 115-kV lines would require roadway crossings during installation of the proposed overhead lines and temporary structure installation and wire stringing activities would occur along roadways as discussed in Section 2.4.4.4. “Traffic Control and Lane Closure.” These activities could temporarily cause safety impacts to motorists, bicyclists, and pedestrians. Prior to stringing conductor across roads, the applicant would ensure that safety devices such as traveling grounds, guard structures, and radio-equipped roving, public safety vehicles, and linemen would be in place prior to the initiation of wire-stringing activities. Additionally, as described in Section 2.4.5.6, “Wire Stringing,” one or more of the following methods would be employed to protect the public: erection of a highway net and guard structure system to prevent a conductor from falling into traffic; detour of all traffic off a highway at the crossing position; implementation of a controlled continuous traffic break while stringing operations are performed; or strategic placement of special line trucks with extension booms on the highway deck. Depending on the permitting agency, the use of a

secondary safety take-out sling at highway crossings may be required. Safety impacts may be significant, depending on how these measures are implemented. Mitigation Measure TT-1 would require development of a Traffic Management and Control Plan prior to commencement of construction activities to reduce potential safety hazards. Impacts would be less than significant with mitigation.

Operation and Maintenance

Project operation would not require construction of roads or driveways. SCE would adhere to safety precautions if any line stringing is needed for repairs. Some slow trucks may exit from the substation site, but the volume of trucks would be negligible. Heavy truck traffic would be limited such that it would not cause a noticeable acceleration in pavement degradation. Safety impacts would be less than significant.

Mitigation Measures

MM TT-1: Traffic Management and Control Plan.

MM TT-6: Road Damage Repair.

Impact TT-5 (ASP): **Result in inadequate emergency access.**
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Relocation of the agricultural water pipeline from beneath the Alberhill Substation site and places where the components of the proposed Alberhill Project span a road or require a lane closure may result in impeded emergency access along those roadways. This would be a significant impact. MM TT-7 would require coordination with local emergency services providers so that the local emergency service providers can anticipate road closures. Impacts would be less than significant with mitigation.

Operation and Maintenance

The project would not result in the permanent closure of any roads or lanes and no temporary road or lane closures are planned during operations. Maintenance activities that would occur outside access roads or structure pads or require disturbance of public roadways would be infrequent. However, any such activities would be coordinated with local jurisdictions, and access for emergency vehicles would be maintained as required under MM TT-7. Impacts would be less than significant with mitigation.

Mitigation Measure

MM TT-7: Emergency Service Provider Notification.

Impact TT-6 (ASP): Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities.
LESS THAN SIGNIFICANT WITH MITIGATION

Construction

Construction activities and construction traffic would take place on roads that are also used by public transit routes, bicyclists (including on designated bike lanes), and pedestrians. Public transit, pedestrian, and bicycle circulation may temporarily be affected by construction activities, including utility pole installation and wire stringing. Temporary impacts may also occur in or near residential areas where roads that may be used by pedestrians or bicyclists would be temporarily blocked during construction.

1 Bikeway and trail segments are located adjacent to the proposed Alberhill Substation site and parallel
2 115-kV Segments ASP1 through ASP5. Access roads and staging areas in proximity to the proposed site
3 for 500-kV Tower SA6 would intersect a regional trail identified in the City of Lake Elsinore General
4 Plan. 115-kV Segment ASP2 would cross a Lake Elsinore Historic Trail; Lake Elsinore Lake, River,
5 Levee Regional Trail; Regional Trail; County Combination Trail; and County Community Trail. 115-kV
6 Segment ASP 4 would cross Lake Elsinore Lake, River, Levee Regional Trail; County Community Trail,
7 and County Combination Trail. 115-kV Segment ASP 5 would cross a County Community Trail and
8 County Regional Trail.

9
10 Construction activities are not expected to impede pedestrian or bicyclist movement such that no suitable
11 alternative routes would be available. Effects would occur for a relatively short period at any one
12 location as utility structures are installed incrementally along the proposed routes. However, as
13 previously discussed, work near roadways could result in a safety hazard for bicyclists and pedestrians,
14 which is a significant impact. MM TT-1 would require development of a Traffic Management and
15 Control Plan prior to commencement of construction activities to reduce potential safety hazards. Impacts
16 would be less than significant with mitigation.

17
18 Several bus routes parallel the proposed 115-kV segments (Table 4.15-1). Staging of equipment during
19 construction may require the temporary closure of existing bus stops along the following roadways:

- 20
21 • Collier Avenue (ASP 3)
22 • Casino Drive (ASP 4)
23 • Mission Trail (ASP 4)
24 • Murrieta Drive (ASP 7)

25 Bus stop closure would be a temporary condition and would not conflict with adopted policies, plans, or
26 programs regarding public transit or otherwise substantially decrease the performance or safety of such
27 facilities. Therefore, impacts under this criterion would be less than significant.

28
29 ***Operation and Maintenance***

30 Operational impacts would be negligible because the proposed project would not result in the permanent
31 closure of bicycle, pedestrian, or public transit facilities. Inspection activities for the transmission and
32 subtransmission lines would occur on a yearly basis. Routine maintenance activities for the substation
33 and telecommunications system would not be anticipated to require more than a few vehicles and,
34 therefore, would have a less than significant impact during operation of the project.

35
36 ***Mitigation Measure***

37
38 **MM TT-1: Traffic Management and Control Plan.**

39
40 **Impact TT-7 (ASP): Result in inadequate parking that would result in a significant impact on**
41 **the environment.**
42 *LESS THAN SIGNIFICANT*

43
44 ***Construction***

45 Construction of project components would not require on-street parking. On-site vehicle parking for
46 construction workers and construction equipment would be accommodated within staging areas or the

1 ROW for the transmission, subtransmission, distribution, and telecommunications. Installation of the
2 proposed Alberhill Project 115-kV lines would require roadway crossings and wire stringing activities
3 along roadways that may require lane closures that could temporarily limit on-street parking in Riverside
4 County and the City of Lake Elsinore. A minimal number of parking spots would be unavailable at any
5 given time, given that most streets are not extensively used for parking. Impacts would be less than
6 significant.

7 Stringing of 115-kV Segment ASP4 could result in the temporary closure of the car dealership parking
8 lot on Auto Center Road, and parking lots for businesses located along Malaga Road. Extensive closure
9 of parking lots in a commercial area would not result in a significant impact on the environment. Impacts
10 under this criterion would be less than significant.

13 ***Operation and Maintenance***

14 The proposed project would not result in any impacts to parking during operation. Construction of the
15 project would not result in the permanent removal of any on-street parking spaces. Operation of the
16 proposed project would utilize parking at the proposed substation. Maintenance activities that would
17 occur outside access roads or structure pads or that would require disturbance of public roadways would
18 be infrequent and temporary such that parking impacts would be negligible. Impacts under this criterion
19 would be less than significant.

21 **4.15.6 References**

23 AirNav. 2016a. Perris Valley Airport (L65). Perris, California. <https://www.airnav.com/>. Accessed
24 March 3, 2016.

26 _____ . 2016b. Skylark Field Airport (CA89). Lake Elsinore, California. <https://www.airnav.com/>.
27 Accessed March 3, 2016.

29 _____ . 2016c. Chino Airport (KCNO). Chino, California. <https://www.airnav.com/>. Accessed March 3,
30 2016.

32 American Legal. 2015a. City of Menifee Municipal Code, Table I: County Ordinances Adopted.
33 http://library.amlegal.com/nxt/gateway.dll/California/menifee_ca/cityofmenifeecaliforniacodeofo
34 rdinances?f=templates\$fn=default.htm\$3.0\$vid=amlegal:menifee_ca. Accessed January 27,
35 2016.

37 _____ . 2015b. City of Corona Municipal Code, Chapter 10.31 Truck Routes and Commercial Vehicles;
38 Chapter 12.08 Excavation in Public Rights-of-Way.

40 California Law. 2015. Vehicle Code Section 35100-35111, Section 35250-35252, 35400-35414, 35550-
41 35558; and Streets and Highway Code Section 670-695. <http://www.leginfo.ca.gov/calaw.html>.
42 Accessed October 5, 2015.

44 Caltrans (California Department of Transportation). 2002. Guide for the Preparation of Traffic Impact
45 Studies. December.

47 _____ . 2015a. Encroachment Permit Permits. <http://www.dot.ca.gov/hq/traffops/developserv/permits/> .
48 Accessed June 23, 2015.

- 1 _____ . 2015b. Transportation Permits. <http://www.dot.ca.gov/hq/traffops/permits>. Accessed July 6,
2 2015.
- 3
- 4 City of Lake Elsinore . 2011. City of Lake Elsinore General Plan. Section 2.0: Community Forum.
5 December 13.
- 6
- 7 City of Menifee. 2013. City of Menifee General Plan: Circulation Element C-1: Roadway System
8 <https://www.cityofmenifee.us/221/General-Plan>. Accessed March 3, 2016.
- 9
- 10 City of Perris. 2008. City of Perris General Plan: Circulation Element. August 26.
- 11
- 12 City of Wildomar. 2015. City of Wildomar General Plan. <http://wldomargp.org/>. Accessed January 27,
13 2016.
- 14
- 15 Codepublishing. 2015. City of Lake Elsinore Municipal Code, Chapter 10.24 Truck Routes, Chapter
16 12.08 Encroachment Permits for Constructions in Public Places.
17 <http://www.codepublishing.com/CA/LakeElsinore/#!/lakeelsinore12/LakeElsinore1208.html#12.08>. Accessed January 27, 2016.
- 18
- 19
- 20 EIP Associates. 2004. City of Corona General Plan. [http://www.discovercorona.com/City-
21 Departments/Community-Development/Planning-Division/FINAL-GP.aspx](http://www.discovercorona.com/City-Departments/Community-Development/Planning-Division/FINAL-GP.aspx). Accessed January
22 28, 2016.
- 23
- 24 Hesnard, Sandy. 2010. Aviation Environmental Specialist, California Department of Transportation,
25 Division of Aeronautics. Sacramento, California. Scoping Comment Letter. April 26.
- 26
- 27 LLG (Linscott, Law, and Greenspan). 2016a. Revised Traffic Impact Analysis Report. Alberhill System
28 Project. Riverside County, California. January 2016 Report.
- 29
- 30 _____ . 2016b. Traffic Impact Analysis Report. Valley-Ivyglen Project. Riverside County, California.
31 January 2016 Report.
- 32
- 33 _____ . 2012. Revised Traffic Impact Analysis Report. Alberhill System Project. Riverside County,
34 California. November 2012 Report.
- 35
- 36 Municode. 2015a. County of Riverside Municipal Code, Chapter 10.08 Oversize and Overweight
37 Vehicles. https://www.municode.com/library/ca/riverside_county. Accessed January 27, 2016.
- 38
- 39 _____ . 2015b. City of Perris Municipal Code, Chapter 10.40 Truck Routes.
40 https://www.municode.com/library/ca/perris/codes/code_of_ordinances?nodeId=TIT12STSI_CH12.12EXEN. Accessed January 27, 2016.
- 41
- 42 Qcode 2015. City of Wildomar Municipal Code, Chapter 10.08 Oversize and Overweight Vehicles;
43 Chapter 12.08 Excavations and Encroachments on City Streets.
44 <http://www.qcode.us/codes/wildomar/>. Accessed January 27, 2016.
- 45
- 46
- 47 Riverside Transit Agency. 2013. Riverside Transit Agency System Map. May 12.
- 48

- 1 Riverside County. 2014. Riverside County General Plan Circulation Element.
2 <http://planning.rctlma.org/ZoningInformation/GeneralPlan/RiversideCountyGeneralPlan2008.aspx>
3 . Accessed January 27, 2016.
- 4
- 5 Riverside County ALUC (Airport Land Use Commission). 2004. Riverside County Airport Land Use
6 Compatibility Plan. October 14.
- 7
- 8 _____. 2010. Riverside County Airport Land Use Compatibility Plan: Volume 2. Background Data:
9 Perris Valley Airport and Environs. Adopted March 10.
- 10
- 11 Riverside County Transportation Commission. 2011. Congestion Management Program. December 14.
- 12
- 13 _____. 2014. Traffic Impact Analysis Preparation Guide.
14 <http://www.cityofhemet.org/DocumentCenter/Home/View/784>. Accessed March, 3. 2016
- 15
- 16 Transportation Research Board. 2000. Highway Capacity Manual. Transportation Research Board
17 National Research Council. Published by the National Academy of Sciences.
- 18
- 19 United States Government Printing Office. 2016. Title 14 Aeronautics and Space, Part 133 Rotocraft
20 External Load Operations. <http://www.ecfr.gov/cgi-bin/text-idx?SID=51c980f19c12d8d4a22bfc6096193afb&mc=true&node=pt14.3.133&rgn=div5>.
21 Accessed March 3, 2016.
- 22
- 23 United States Government Printing Office. 2015. Title 14 Aeronautics and Space, Part 77 Safe Efficient
24 Use, and Preservation of The Navigable Airspace, SubPart 77.9 Construction or Alteration
25 Requiring Notice. http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=33283aace99a25abcd7c8a7e7ec583ce&ty=HTML&h=L&mc=true&n=pt14.2.77&r=PART#se14.2.77_19 Accessed December 8, 2015.

This page intentionally left blank.