C.14 Transportation and Traffic

Introduction

This section describes effects associated with transportation and traffic that would be caused by implementation of the VSSP. The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts of the proposed Project, and recommends measures to reduce or avoid significant impacts anticipated from Project construction and O&M. In addition, applicable laws and regulations relevant to transportation and traffic are described. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the proposed Project.

Scoping Issues Addressed

During the scoping period for the EIR, written comments were received from agencies, organizations, and the public. These comments identified various substantive issues and concerns relevant to the EIR analysis. However, no issues related to transportation or traffic were raised during the scoping period.

C.14.1 Environmental Setting

The environmental setting for the proposed Project includes the roadways, rail lines, and other transportation facilities and operations that would be directly or indirectly affected by construction and O&M of the VSSP.

C.14.1.1 Roadways

The affected environment includes roadways providing regional and local access to the Project and those that would be crossed by the Project alignment. The proposed Project consists of Segments 1 and 2, which total 15.4 miles in total length. Segment 1 involves construction of a new 115 kilovolt (kV) subtransmission line for a total of 12 miles through unincorporated Riverside County, the City of Menifee, and a small portion of the City of Murrieta. Segment 2 involves reconductoring a section of an existing 115-kV Subtransmission Line for a total of 3.4 miles through unincorporated Riverside County and the City of Temecula. Additionally, construction may utilize an existing material staging yard in the City of Perris, which is outside the immediate Project area.

Terminology

Level of service (LOS) is a qualitative indicator used for describing the operating performance of a roadway segment or intersection. It is measured from LOS A (excellent conditions) to LOS F (extreme congestion and delays). Typically, LOS A through D is considered to be acceptable. The LOS is based on the intersection capacity utilization (ICU) methodology value, which is a ratio between average daily traffic (ADT) volumes and the overall capacity (V/C). The relationship between the V/C value and the LOS is shown in Table C.14-1.

Table C.14-1. Relationship Between Volume/Capacity Values and Levels of Service

V/C Value	LOS
0.00 to 0.60	A
> 0.60 to 0.70	B
> 0.70 to 0.80	C
> 0.80 to 0.90	D
> 0.90 to 1.00	E
> 1.00	F

Source: FHWA, 2015

Regional Roadways

Interstate 15 (I-15), Interstate 215 (I-215), State Route (SR) 74, and SR-79 provide regional access to the Project area and are under the jurisdiction of the California Department of Transportation (Caltrans). The following describes these freeway segments near the proposed Project:

- **I-15** is eight lanes wide and located west of the proposed Project area. I-15 joins I-215 in the City of Murrieta and continues south into San Diego County. Freeway interchanges near the Project area include those at SR-79 and I-215.
- **I-215** is a north-south freeway with four travel lanes, located west of the proposed Project. I-215 joins I-15 in the City of Murrieta and continues north through the City of Menifee and the communities of Sun City, Romoland, Winchester, and Homeland. Freeway interchanges near the Project include those at Ethanac Road, McCall Boulevard, and Newport Road.
- **SR-74** is four lanes wide and traverses in an east-west direction. SR-74 merges with SR-79 northeast of the proposed Project, while the roadway parallels Matthews Road until it merges with I-215 northwest of the proposed Project.
- **SR-79 (also known as Winchester Road)** is located east of Segment 1 of the proposed Project and west of Segment 2 of the proposed Project for a majority of the route. In the southerly portion of Segment 1 (near the intersection of Leon Road and Thompson Road), the proposed 115 kV subtransmission line traverses the two-lane road in a north-south direction.

Table C.14-2 provides current operating conditions for each freeway in the Project area. As shown in Table C.14-2, both I-15 and I-215 currently operate at an unacceptable LOS F.

Table C.14-2. Regional Access Roadway Characteristics and Current Operating Conditions

Roadway	ADT Volume	Roadway Capacity	V/C Ratio	Existing LOS	Crossed by Project Alignment?
I-15	163,000	160,500	1.02	F	No
I-215	77,000	76,500	1.01	F	No
SR-74	32,000	35,900	0.89	D	No
SR-79	8,300	18,000	0.46	A	Yes

Source: SCE, 2014

Local Roadways

While a number of public roadways would provide local access to, or would be crossed by, the proposed Project, key local roadways include Holland Road, Penny Cress Lane, Max Gillis Boulevard, Simpson Road, Scott Road, Briggs Road, Grand Avenue, Benton Road, Menifee Road, Matthews Road, Case Road, Leon Road, Thompson Road, Nicolas Road, Murrieta Hot Springs Road, Auld Road, Ethanac Road, Antelope Road, and Newport Road/Domenigoni Parkway (SCE, 2014). Table C.14-3 provides roadway characteristics and current operating conditions of these local roadways (as available). As shown in Table C.14-3, where existing traffic data is available, all local roads currently operate at an acceptable LOS.

C.14.1.2 Air Traffic

Two public airports, one private airstrip, and one private helipad are located within 2 miles of the proposed Project:

- **French Valley Airport** is a publically owned airport located approximately 0.45 of a mile west of Segment 2. French Valley Airport contains one runway and averaged 269 aircraft operations per day for the 12-month period ending July 14, 2014 (AirNav, 2015a). All operations were general aviation aircraft.

Table C.14-3. Local Access Roadway Characteristics and Current Operating Conditions						
Roadway	Number of Lanes	ADT Volume	Roadway Capacity	V/C Ratio	Existing LOS	Crossed by Project Alignment?
Holland Road	2-4	4,220	13,000	0.32	A	Yes
Penny Cress Lane	2	N/A	N/A	N/A	N/A	No
Max Gillis Boulevard	2	N/A	N/A	N/A	N/A	No
Simpson Road	2	5,220	18,000	0.29	A	Yes
Scott Road	2-4	10,730	18,000	0.60	B	Yes
Briggs Road	2	4,190	18,000	0.23	A	Yes
Grand Avenue	2	N/A	N/A	N/A	N/A	Yes
Benton Road	2	N/A	N/A	N/A	N/A	Yes
Menifee Road	2	9,030	18,000	0.50	A	Yes
Matthews Road	2	4,380	13,000	0.34	A	Yes
Case Road	Unpaved	N/A	N/A	N/A	N/A	Yes
Leon Road	2	6,200	18,000	0.34	A	Yes
Thompson Road	2-4	4,500	18,000	0.25	A	No
Nicolas Road	4	7,530	35,900	0.21	A	Yes
Murrieta Hot Springs Road	4	29,350	35,900	0.82	D	Yes
Auld Road	2	N/A	N/A	N/A	N/A	Yes
Ethanac Road	2	5,536	13,000	0.42	A	No
Antelope Road	2-4	8,750	13,000	0.67	B	No
Newport Road/Domenigoni Parkway	6	20,230	53,900	0.38	A	Yes

Source: SCE, 2014
Notes: N/A: Data is unavailable

- **Perris Valley Airport** is a publically owned airstrip located approximately 0.12 of a mile south of Material Staging Yard 3. Perris Valley Airport contains one runway and averaged 75 aircraft operations per day for the 12-month period ending January 31, 2015 (AirNav, 2015b). Almost all operations were general aviation aircraft, with less than one percent of air traffic being military.
- **Pines Airpark** is a privately owned airstrip located approximately 0.55 of a mile east of Segment 1 of the proposed Project (Leon Road and Loretta Road). Pines Airpark contains one dirt runway and has four aircraft based on the field (AirNav, 2015c).
- **SCE Menifee Service Center Helipad** is a privately owned helipad located approximately 0.18 of a mile east of SCE's existing Valley 500/115-kV Substation.

C.14.1.3 Rail Service

The Burlington Northern Santa Fe Railroad runs through the City of Menifee and Riverside County along Matthews Road and would be crossed by Segment 1 of the Project. This railroad line provides freight transport service between the Hemet/San Jacinto area, March Inland Port, and major markets in California and other destinations north and east (SCE, 2014).

C.14.1.4 Transit Service

The Riverside Transit Agency (RTA) provides transit services to western Riverside County, with bus routes 19, 27, 30, and 74 utilizing SR-74 within the City of Perris near Segment 2 of the proposed Project (SCE, 2014). No other public transit routes were identified in the Project area.

C.14.1.5 Bikeways and Pedestrian Facilities

Bikeways are classified as Class I through III, which are defined as follows:

- Class I (Bike Paths): Trails used exclusively for non-motorized access and typically shared with pedestrians.
- Class II (Bike Lanes): Marked lanes on roadways for exclusive use by bicyclists.
- Class III (Bike Routes): Roadways in which bicyclists and motorists share the travel lane.

The following designated bikeways are located along the Project alignment (SCE, 2014):

- Class I Bike Path exists from the intersection of Leon Road and Garbani Road, south to Benton Road, running parallel to Segment 1 of the proposed Project.
- Class I Bike Path exists from the southeast corner of Leon Road and Benton Road, south to Murrieta Hot Springs Road, running parallel to Segment 2 of the proposed Project.
- Class II Bike Lane along SR-79, which is crossed by Segment 2.

While limited pedestrian movements occur within most residential streets, the proposed Project would traverse existing sidewalks along Leon Road south of Baxter Road, along the north side of Murrieta Hot Springs Road at Leon Road, and the north and south sides of Nicolas Road at Leon Road (SCE, 2014).

C.14.2 Regulatory Framework

C.14.2.1 Federal

14 CFR Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace. Construction of a project could potentially impact aviation activities if a structure or equipment were positioned such that it would be a hazard to navigable airspace. The Federal Aviation Administration (FAA) has established reporting requirements for construction or alterations around airport and heliport facilities that meet certain criteria regarding final height above ground level and penetration of an imaginary conical surface extending out from the air facility.

With regard to aviation safety, Subpart B, Section 77.9 of the regulations indicates that for areas around airports having runways longer than 3,200 feet, if any construction that is more than 200 feet above ground level or results in an object penetrating an imaginary surface extending outward and upward at a ratio of 100 to 1 from a public or military airport runway out to a horizontal distance of 20,000 feet (approximately 3.78 miles), then an applicant is required to submit FAA Form 7460 1, Notice of Proposed Construction or Alteration, to the Manager, Air Traffic Division, FAA Regional Office having jurisdiction over the area for review and approval of the project (FAA, 2015). For areas around heliports, this same requirement applies to any construction that is more than 200 feet above ground level or would penetrate an imaginary surface extending outward and upward at a ratio 25 to 1 from a public or military heliport out to a horizontal distance of 5,000 feet.

C.14.2.2 State

The California Vehicle Code includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways, the safe operation of vehicles, and the transportation of hazardous materials (DMV, 2015).

California Government Code Sections 65352, 65404, 65940, and 65944, amended by Senate Bill 1462, requires local planning agencies to notify the military whenever a proposed development project or

general plan amendment is located within 1,000 feet of a military installation, located within special use airspace, or is located beneath a low-level flight path.

Caltrans

Within the Guide for the Preparation of Traffic Impact Studies (TIS), the following criteria are a starting point in determining when a TIS for a project is needed (Caltrans, 2002):

1. Generates over 100 peak hour trips assigned to a State highway facility.
2. Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
3. Generates 1 to 49 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").

As discussed later in Section C.14.4, during construction, the proposed Project would generate a maximum of 402 daily trips and exceed the thresholds identified above. As stated in Caltrans' Guide for the Preparation of Traffic Impact Studies, a TIS may be as simple as providing a traffic count to as complex as a microscopic simulation (Caltrans, 2002). The appropriate level of study is determined by the particulars of a project, the prevailing highway conditions, and the forecasted traffic. Because the proposed Project would only generate traffic volumes exceeding these thresholds temporarily during the 16-month construction period, a stand-alone TIS was not considered necessary. The analysis provided in Section C.14.4 quantitatively compares maximum daily construction trips against the existing volumes and capacities of study area roadways. This level of analysis is considered consistent with the Guide for the Preparation of Traffic Impact Studies.

In addition, Caltrans prepares various planning documents for its transportation facilities throughout the State. The goals established for specific highways are documented in transportation concept reports (TCR). Based on the TCR's for freeways providing regional access to the Project, Caltrans has identified the following performance standards near the Project area (SCE, 2014):

- **I-15**: LOS of E (as shown in Table C.14-2, this performance standard is already exceeded under existing conditions).
- **I-215**: LOS D (as shown in Table C.14-2, this performance standard is already exceeded under existing conditions).
- **SR-74**: LOS D.
- **SR-79**: LOS E.

Caltrans issues encroachment permits under authority of law as defined in Section 660 of the California Streets and Highways Code for any proposed encroachments defined as "any tower, pole, pole line, pipe, pipeline, fence, billboard, stand or building, or any structure, object of any kind or character not particularly mentioned in the section, or special event, which is in, under, or over any portion of the State highway right-of-way. 'Special event' means any street festival, sidewalk, sale, community-sponsored activity, or community-approved activity." A permit application for the encroachment activities, along with a traffic control plan designed and signed by a California Registered Engineer shall be submitted to Caltrans for review and approval.

C.14.2.3 Local

County of Riverside General Plan

The County of Riverside General Plan Circulation Element contains the following policy relevant to the proposed Project (Riverside County, 2014):

- **Policy C 2.1**: Maintain the following countywide target Levels of Service:
  - LOS "C" along all County-maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

County of Riverside Ordinance No. 499

Ordinance No. 499 gives the County of Riverside Transportation Department the authority to require that permits be obtained for any type of work conducted within a County road right-of-way (ROW), which in many cases extends beyond the paved road to the adjacent private property boundary. This requirement extends to excavation, placement of structures, and any other work within a County ROW.

Riverside County Congestion Management Plan

The Riverside County Transportation Commission (RCTC) oversees the County Congestion Management Plan (CMP). RCTC does not require Traffic Impact Assessments for development proposals. However, local agencies are required to maintain minimum LOS thresholds included in their respective general plans. Therefore, Traffic Impact Assessments on developments are required by the local agencies. Local agencies whose development impacts cause the LOS on a non-exempt segment to fall to "F" must prepare deficiency plans. These plans outline specific mitigation measures and a schedule for mitigating the deficiency (RCTC, 2015).

City of Menifee General Plan

The City of Menifee General Plan Circulation Element contains the following policy relevant to the proposed Project (City of Menifee, 2013):

- **Policy C-1.2:** Require development to mitigate its traffic impacts and achieve a peak hour Level of Service (LOS) D or better at intersections, except at constrained intersections at close proximity to I-215 where LOS E may be permitted.

City of Murrieta General Plan

The City of Murrieta General Plan Circulation Element contains the following policy relevant to the proposed Project (City of Murrieta, 2011):

- **CIR – 1.2:** Maintain a Level of Service "D" or better at all intersections during peak hours. Maintain a Level of Service "E" or better at freeway interchanges during peak hours.

City of Perris General Plan

A proposed Project construction yard is located within the City of Perris. The City of Perris General Plan Circulation Element contains the following policy relevant to the proposed Project (City of Perris, 2008):

- **Policy II.A**: Maintain the following target Levels of Service:

- LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 freeway ramps

City of Temecula General Plan

The City of Temecula General Plan Circulation Element contains the following policy relevant to the proposed Project (City of Temecula, 2015):

- **Goal 1**: Maintain a Level of Service "D" or better at all intersections during peak hours. Maintain a Level of Service "E" or better at freeway interchanges during peak hours. Maintain a Level of Service "C" or better at all intersections during off-peak hours

C.14.3 Applicant-Proposed Measures

The Applicant-Proposed Measures (APMs) applicable to reducing potential transportation and traffic impacts of the proposed Project are shown in Table C.14-4.

Table C.14-4. Applicant-Proposed Measures – Transportation and Traffic

APM	APM Description
APM TRA-1	Traffic control or other management plans would be prepared where necessary to minimize proposed Project impacts on local streets, highways (SR-74 and SR-79), freeways, or other forms of transportation (Class I and Class II bicycle routes).
APM TRA-2	Where the proposed Project work area encroaches on a public ROW and reduces the existing pedestrian path of travel to less than 48 inches wide, alternate pedestrian routing would be provided during construction activities.

Source: SCE, 2014 (PEA Table 3.13).

C.14.4 Environmental Impacts and Mitigation Measures

The methodology used to assess transportation and traffic impacts involves comparing Project actions against the environmental setting presented in Section C.14.1, all within the context of the significance criteria discussed below. Transmission line projects have a greater impact on the surface transportation system during construction than during O&M. That is because O&M typically requires a minimal amount of activity for a transmission line. Therefore, the bulk of the transportation analysis is devoted to impacts during construction.

The primary construction activities along the Project alignment that would interface with the public roadway system include the construction of new transmission structures and the stringing of conductor. Therefore, the analysis addresses impacts from temporary disruptions to roads or travel lanes during construction. Additionally, vehicle trips generated from construction are added to the existing baseline traffic volumes to quantify the temporary increase in traffic levels on Project area roadways.

C.14.4.1 Criteria for Determining Significance

The proposed Project would result in significant impacts to transportation and traffic if it would:

- Criterion TRA1: Conflict with an applicable plan, ordinance or policy establishing measures 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.

- Criterion TRA2: Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Criterion TRA3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Criterion TRA4: Substantially increase hazards because of a design feature or incompatible uses.
- Criterion TRA5: Result in inadequate emergency access.
- Criterion TRA6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

C.14.4.2 Impact Analysis – Direct and Indirect Effects

This section describes the direct and indirect impacts of the proposed Project. Cumulative impacts are discussed separately in Section C.14.4.3.

Impact TRA-1 (Criterion TRA1): Temporary road or travel lane closures could adversely affect traffic flow and congestion, emergency vehicle response, pedestrians/bicyclists routes, and access to adjacent properties. (Class II)

Construction

The Project would require overhead conductors be strung across SR-79 as well as numerous local roads (refer to Table C.14-3). This could require the temporary closure of a road or travel lanes on affected roadway segments during the stringing activity. Also, where new poles would be installed adjacent to roads and where conductor or telecommunication lines would be strung on poles adjacent to roadways, temporary travel lane disruptions may also occur. These closures would temporary disrupt traffic flow and the movement of emergency vehicles, pedestrians/bicyclists, and access to adjacent residential and business properties.

While APM TRA-1 is included as part of the Project (refer to Table C.14-4), Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed to provide specificity regarding the requirements of a Construction Traffic Control Plan for the Project. This mitigation requires the Plan be reviewed and approved by Caltrans, the CPUC, and all other affected jurisdictions. The Construction Traffic Control Plan would address all means to minimize temporary impacts from roadway and travel lane disruptions. With the incorporation of this mitigation, impacts from temporary construction-related disruptions to the affected circulation system would be less than significant (Class II).

Operation

No road or lane closures would be necessary during typical O&M activities. Therefore, no disruptions to the Project area transportation network would occur.

Mitigation Measures for Impact TRA-1

TRA-1 **Construction Traffic Control Plan**. Prior to the start of construction, Southern California Edison (SCE) shall submit a Construction Traffic Control Plan for review and approval by the California Department of Transportation (Caltrans) [for affected freeways], the California Public Utilities Commission (CPUC), and all agencies with jurisdiction over public roads and transportation facilities that would be directly affected by the construction activities and/or would require permits and approvals. The Construction Traffic Control Plan shall include, but not be limited to:

- The locations and use of flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc. according to standard guidelines outlined in the Manual on Uniform Traffic Control Devices, the Standard Specifications for Public Works Construction, and/or the California Joint Utility Traffic Control Manual.

- The locations of all road or traffic lane segments that would need to be temporarily closed or disrupted due to construction activities.
- The locations where guard poles, netting, or similar means to protect transportation facilities for any construction or conductor installation work requiring the crossing of a local street, highway, or rail line are proposed.
- The use of continuous traffic breaks operated by the California Highway Patrol on state highways (if necessary).
- Additional methods to reduce temporary traffic delays to the maximum extent feasible during peak traffic periods (6:00 to 9:00 a.m. and 3:30 to 6:30 p.m., or as directed in writing by the affected public agency in encroachment or other permits). This should also include feasible ways to avoid construction-related trips on I-15 and I-215 during peak traffic periods.
- Prior to the start of construction, provide copies of all approved transportation-related permits and agreements to the CPUC, including methods to comply with all specified requirements, including but not limited to:
  - Encroachment Permit(s) from all affected jurisdictions.
  - Necessary permits or coordination with the Burlington Northern Santa Fe Railroad for the rail line crossing.
- Plans to provide written notification to property owners and tenants at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access if necessary. The coordination shall occur at least one week prior to any blockages.
- Plans to coordinate in advance with emergency service providers to avoid restricting the movements of emergency vehicles. Police departments and fire departments shall be notified in advance by SCE of the proposed locations, nature, timing, and duration of any roadway disruptions, and shall be advised of any access restrictions that could impact their effectiveness. At locations where roads will be blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as immediately stopping work for emergency vehicle passage, providing short detours, and developing alternate routes in conjunction with the public agencies. Documentation of the coordination with police and fire departments shall be provided to the CPUC prior to the start of construction.
- Provisions for ensuring detours or safe movement of pedestrians and bicycles through all affected facilities.
- Plans to coordinate with affected bus transit agencies (if applicable) at least one month prior to construction to minimize the impacts associated with the interruption of bus transit service. Documentation of the coordination with bus transit companies shall be provided to the CPUC prior to the start of construction.
- Define the method to maintaining close coordination, prior to and during construction, with all agencies responsible for encroachment permits on each affected roadway, to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system.

Impact TRA-2 (Criterion TRA1): Traffic related to Project construction and operation could result in unacceptable levels of service on roadways in the Project area. (Class II)

Construction

Based on the anticipated construction schedule, the maximum number of construction personnel that would be required on a single day would be 67 during the 16-month construction period. During this maximum worker period, worker commutes are estimated to add approximately 134 total daily trips to area roadways (SCE, 2014).

In addition to the maximum daily trips generated by worker commutes, construction would include other trips during the workday for the delivery of equipment and materials, movement of cut-and-fill material, watering for dust control, concrete delivery, disposal of waste, and other various construction needs. To assess the impacts of these large truck trips, a heavy vehicle factor known as a passenger car equivalent (PCE) value was applied. This heavy vehicle factor accounts for additional space occupied, reduced speed, and reduced maneuverability associated with these vehicles as compared to standard automobiles. A PCE value of 2.0 was applied to the maximum daily construction truck trip estimates. Based on the use of the 2.0 PCE, construction vehicles would add an additional 268 total daily trips to Project area roadways (SCE, 2014).

When combined, worker commutes and construction-related trips would add a maximum of 402 total daily trips to Project area roadways (SCE, 2014). While these trips would be distributed throughout Project area roads, Table C.14-5 adds the maximum of 402 daily trips to each affected roadway and shows any change in LOS (SCE, 2014). It should be noted, this quantitate analysis can only be completed for regional and local roads where existing LOS is available (refer to Tables C.14-2 and C.14-3). As shown in Table C.14-5, temporary construction-related traffic would not affect the LOS of any Project area roadway over existing conditions. While I-15 and I-215 would continue to operate at LOS F, all other freeways would operate consistent with the Caltrans performance standards identified in Section C.14.2.2. All local roadways would continue to operate consistent with the performance standards identified in Section C.14.2.3 specified for each local jurisdiction.

To ensure that impacts from temporary construction-related trips are reduced to the extent feasible, Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and would require SCE to prepare a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. This plan requires SCE to reduce construction-related trips during peak traffic periods (6:00 to 9:00 a.m. and 3:30 to 6:30 p.m.) on I-15 and I-215, which both currently operate at LOS F. With the incorporation of this mitigation, impacts from temporary construction-related vehicle trips to the performance of Project area roadways would be less than significant (Class II).

Operation

Once constructed, SCE would inspect the subtransmission overhead facilities a minimum of once per year via ground observation, but may occur more frequently based on system reliability (SCE, 2014). Maintenance activities would occur as needed. Due to the limited duration and extent of these activities, minimal daily trips are necessary and would have a negligible effect on the LOS or other performance standard of the transportation system over existing conditions. If a major repair were required at a particular location, temporary trip volumes would likely be less than those addressed during construction. Because the need for major repairs is unknown and O&M trips are short-term, no mitigation is deemed necessary and impacts from O&M vehicle trips to the performance of Project area roadways would be less than significant.

Mitigation Measures for Impact TRA-2

TRA-1 Construction Traffic Control Plan.

Table C.14-5. Construction Traffic Volume Impacts on Regional and Local Roadways

Roadway	Roadway Capacity	Existing Conditions			With Project Construction			Temporary Change in LOS?
		ADT Volume	V/C Ratio	Existing LOS	ADT Volume (With 402 Daily Trips)	Temporary V/C Ratio	Temporary LOS	
I-15	160,500	163,000	1.02	F	163,402	1.02	F	No
I-215	76,500	77,000	1.01	F	77,402	1.01	F	No
SR-74	35,900	32,000	0.89	D	32,402	0.90	D	No
SR-79	18,000	8,300	0.46	A	8,702	0.48	A	No
Holland Road	13,000	4,220	0.32	A	4,622	0.36	A	No
Simpson Road	18,000	5,220	0.29	A	5,622	0.31	A	No
Scott Road	18,000	10,730	0.6	B	11,132	0.62	B	No
Briggs Road	18,000	4,190	0.23	A	4,592	0.26	A	No
Menifee Road	18,000	9,030	0.5	A	9,432	0.52	A	No
Matthews Road	13,000	4,380	0.34	A	4,782	0.37	A	No
Leon Road	18,000	6,200	0.34	A	6,602	0.37	A	No
Thompson Road	18,000	4,500	0.25	A	4,902	0.27	A	No
Nicolas Road	35,900	7,530	0.21	A	7,932	0.22	A	No
Murrieta Hot Springs Road	35,900	29,350	0.82	D	29,752	0.83	D	No
Ethanac Road	13,000	5,536	0.42	A	5,938	0.46	A	No
Antelope Road	13,000	8,750	0.67	B	9,152	0.70	B	No
Newport Road/Domenigoni Parkway	53,900	20,230	0.38	A	20,632	0.38	A	No

Source: SCE, 2014

Impact TRA-3 (Criterion TRA2): Construction or operational daily vehicle trips could conflict with Congestion Management Program performance standards. (Class II)

Construction

The affected CMP network includes I-15, I-215, SR-74, and SR-79. As shown in Table C.14-5, when construction-related trips are added to these freeways, no temporary change to existing LOS would occur. However, both I-15 and I-215 would operate at LOS F with or without the addition of Project construction-generated traffic. To ensure that any temporary impact of construction-related trips to these CMP roadways is reduced to the extent feasible, Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and would require SCE to prepare a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. This plan requires SCE to reduce construction-related trips on I-15 and I-215 during peak traffic periods, to the extent feasible. With the incorporation of this mitigation, impacts from temporary construction-related vehicle trips to the CMP circulation network are considered less than significant (Class II).

Operation

Trips generated by O&M activities would likely travel along CMP freeways to access the Project area. However, as discussed under impact TRA-2, these activities would generate a very small volume of daily traffic for a short-term period and would have a negligible effect on the performance of the CMP transportation system. Therefore, impacts to the CMP circulation network from O&M would be less than significant.

Mitigation Measures for Impact TRA-3

TRA-1 Construction Traffic Control Plan.

Impact TRA-4 (Criterion TRA3): Project components could affect aviation safety or activities associated with airport facilities. (Class II)

Construction

Construction of the proposed Project would not include the use of helicopters or other equipment that could temporarily affect airspace safety or conflict with nearby airport facilities. Less than significant impacts to aviation safety would occur during construction.

Operation

The Project alignment was compared to the military flight paths and airspace designations of the California Military Land Use Compatibility Analysis (CMLUCA) database to determine whether the Project is located within military special-use airspace or is located beneath a military designated low-level flight path (CMLUCA, 2015). Based on the CMLUCA, the Project is not located within special-use military airspace or an area designated for low-level military flight paths and no action is required with respect to notifying the military about the proposed Project (CMLUCA, 2015).

As stated in Section B.3.1.2, FAA Notifications, SCE would submit FAA Form 7460-1 (Notice of Proposed Construction or Alteration) for those subtransmission structures and conductor wire spans exceeding the FAA thresholds, in this case, primarily due to their proximity to French Valley Airport and Perris Valley Airport. During their review, the FAA will identify if any Project features pose aviation hazards and recommend any safety devices that may be required and whether any tower heights would be restricted. Pending FAA determinations, Mitigation Measure TRA-2 (*Comply with FAA 7460-1 Determination Recommendations*) is proposed to ensure SCE would incorporate all FAA recommendations into the final Project design to ensure

safety of navigable airspace. With the incorporation of this mitigation, impacts from Project features to aviation safety would be less than significant (Class II).

Mitigation Measures for Impact TRA-4

TRA-2 Comply with FAA 7460-1 Determination Recommendations. Pursuant to Federal Aviation Administration (FAA) guidelines, Southern California Edison (SCE) shall submit FAA Form 7460-1, Notice of Proposed Construction or Alteration, to the Manager of the FAA Air Traffic Division for review and approval of the approved Project. SCE shall provide all FAA determinations to the California Public Utilities Commission (CPUC). SCE shall implement all recommended safety features or Project design changes recommended by the FAA through the FAA 7460-1 process and provide documentation to the CPUC of their implementation.

Impact TRA-5 (Criterion TRA4): Project activities could increase transportation hazards or damage roads in the Project area. (Class II)

Construction

As discussed in Impact TRA-1, Project construction is expected to require temporary closures of a road or travel lanes. These disruptions and the presence of construction equipment could temporarily increase roadway hazards. Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and requires SCE to prepare a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. As part of this Plan, SCE would provide methods to reduce temporary transportation hazards in a variety of ways, including through the use of flaggers, warning signs, lights, barricades, delineators, cones, arrow boards, etc. on affected roadways. The Plan also requires SCE to provide ways for ensuring the safe movement of pedestrians and bicycles through work areas and requires coordination with the Burlington Northern Santa Fe Railroad for the necessary rail line crossing. With the incorporation of this mitigation, hazard impacts to the surface transportation network during construction would be less than significant (Class II).

Under applicable laws and ordinances, heavy truckloads are required to not exceed legal weight limits applicable to roads and bridges in the Project area. A Caltrans permit would be required for the movement of vehicles/loads exceeding statutory weight and dimension limits on freeways. Compliance with such permits, if applicable, is included within Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) and would reduce any hazard impacts from oversize vehicle trips. Furthermore, the movement of heavy trucks and equipment on roadways providing access to Project work areas and construction yards could potentially result in damage to road surfaces, shoulders, curbs, sidewalks, signs, and light standards. Mitigation Measure TRA-3 (*Repair Roadways and Transportation Facilities Damaged by Construction Activities*) is proposed to ensure any damage and deterioration attributed to the Project would be repaired. With the incorporation of this mitigation, hazard impacts from transportation facility damage demonstrable to the Project would be less than significant (Class II).

Operation

No road or lane closures would be necessary during typical O&M activities. Furthermore, normal maintenance activities are not expected to require heavy haul trips or equipment outside the Project ROW that could affect the safe use of transportation facilities or damage public roadways. Less than significant roadway hazard impacts would occur from O&M of the proposed Project.

Mitigation Measures for Impact TRA-5

TRA-1 Construction Traffic Control Plan.

TRA-3 Repair Roadways and Transportation Facilities Damaged by Construction Activities. If roadways, sidewalks, bike lanes, medians, curbs, shoulders, or other such transportation features are damaged by Project construction activities, as determined by the affected public agency, such damage shall be repaired and restored to their pre-Project condition by Southern California Edison (SCE). Prior to construction, SCE shall confer with agencies having jurisdiction over the roads anticipated to be used by heavy delivery vehicles and equipment. At least 30 days prior to construction, SCE shall photograph or video record all transportation facilities within 500 feet in each direction of heavy vehicle ingress/egress points from public roadways~~the Project and construction yard access points (where heavy vehicles will leave public roads to reach Project sites)~~, and shall provide the California Public Utilities Commission (CPUC), the respective local jurisdictions, and the California Department of Transportation (Caltrans) [if applicable] with a copy of these images.

At the end of major construction, SCE shall coordinate with each affected jurisdiction to confirm what repairs are required. Any damage is to be repaired to the pre-construction condition within 60 days from the end of all construction, or on a schedule mutually agreed to by SCE and the affected jurisdiction. SCE shall provide the CPUC, the respective local jurisdictions, and Caltrans (if applicable) proof when any necessary repairs have been completed.

Impact TRA-6 (Criterion TRA5): Project activities could cause a temporary disruption to emergency response access or vehicle movement. (Class II)

Construction

As discussed in Impact TRA-1, Project construction is expected to require temporary closures of a road or travel lanes. These disruptions and the presence of construction equipment and activities could temporarily impede access and restrict movements of emergency service vehicles. Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and requires SCE to prepare a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. As part of this Plan, SCE would coordinate in advance with emergency service providers and ensure adequate access and movement of emergency vehicles through work areas. Additionally, the Plan requires SCE to provide written notification to property owners and tenants at properties affected by access restrictions to inform them about the timing and duration of obstructions and to arrange for alternative access, if necessary. With the incorporation of this mitigation, impacts to emergency service access and vehicle movements during construction would be less than significant (Class II).

Operation

No road or lane closures would be necessary during typical O&M activities. Therefore, normal maintenance activities would not be expected to restrict emergency service access or vehicle movements. Less than significant impacts would occur from O&M of the proposed Project.

Mitigation Measures for Impact TRA-6

TRA-1 Construction Traffic Control Plan.

Impact TRA-7 (Criterion TRA6): Project activities could cause a temporary disruption to public transit operations or designated pedestrian/bicycle paths. (Class II)

Construction

As discussed in Impact TRA-1, Project construction is expected to require temporary closures of a road or travel lanes. These disruptions and the presence of construction equipment and activities could temporarily impede movements of public transit vehicles and affect existing sidewalks and designated bicycle paths (refer to Section C.14.1.5 for their locations). While APM TRA-2 is included as part of the Project (refer to Table C.14-3), Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed to further mitigate impacts by providing specifics within a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. As part of this Plan, SCE would coordinate with affected bus transit agencies and include provisions for ensuring detours through all affected pedestrian and bicycle facilities. With the incorporation of this mitigation, impacts from temporary construction-related disruptions to these modes of transportation would be less than significant (Class II).

Operation

No road or lane closures would be necessary during typical O&M activities. Normal maintenance activities would not restrict transit stops or vehicle movements. Project O&M also would not conflict with sidewalks or designated bicycle paths (refer to Section C.14.1.5 for their locations). Therefore, the proposed Project would not conflict with adopted policies, plans, or programs supporting regarding public transit, bicycle, or pedestrian facilities. Less than significant impacts would occur from Project O&M.

Mitigation Measures for Impact TRA-7

TRA-1 Construction Traffic Control Plan.

C.14.4.3 Cumulative Impacts

Geographic Extent/Context

The geographic area of the cumulative analysis for the transportation and traffic analysis is the regional and local access roadways identified in Tables C.14-2 and C.14-3, respectively. This geographic area was selected because cumulative projects listed in Table C.1-1 could have an impact on traffic volumes and physical conditions on these roadways and other transportation facilities. While major projects outside this defined geographic area could have an effect on the traffic volumes shown in Tables C.14-2 and C.14-3, the impacts would be more from an ambient/regional growth rate that was applied to the existing traffic volumes. The purpose of this cumulative analysis is to evaluate impacts from Project-related activities on roadway segments shared by cumulative projects listed in Table C.1-1.

Existing Cumulative Conditions

Tables C.14-2 and C.14-3 present existing traffic volumes for regional and local access roadways serving the proposed Project and cumulative projects identified in Table C.1-1. The transportation network that serves the Project area has been developed primarily by public agencies to accommodate the demand for local and regional travel through and within the area. Caltrans and each local jurisdiction planned and constructed the roadway, bikeway, and pedestrian facilities, while the Burlington Northern Santa Fe Railroad constructed the rail facility. Public and private aviation facilities have been constructed and expanded as demand and land availability has allowed.

The transportation infrastructure has been expanded and improved through the years to serve the continually growing population, number of residences, and quantities of commercial, industrial, and institutional uses in the area. As these land uses have historically experienced steady growth, the

volumes of traffic on the roadways and the demand for travel in all modes have likewise experienced steady increases. It is anticipated that these trends will continue into the future as the area is expected to continue the pattern of population, housing, and employment growth in the coming years.

Cumulative Impact Analysis

The potential for transportation and traffic impacts of the proposed Project (described in Section C.14.4.2) to combine with the effects of other proposed, planned, and reasonably foreseeable future projects, as listed in Table C.1-1, that are within the geographic extent of the cumulative analysis are described below for each significance criterion.

Criterion TRA1: Conflict with an applicable plan, ordinance or policy establishing measures 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.

Cumulative traffic impacts would occur on the roadways and other transportation facilities that would be affected by the proposed Project if construction activities from cumulative projects were to be implemented simultaneously with the construction of the proposed Project. As listed in Table C.1-1, a number of projects could have a cumulative impact on traffic conditions during construction of the proposed Project. These projects would include daily vehicle trips that would share travel routes of Project construction-related vehicle trips or be crossed by the Project alignment.

Cumulative traffic impacts could be substantial if simultaneous construction activities resulted in roadway blockages or other transportation disruptions that affected a roadway to a greater extent than the proposed Project alone (Impact TRA-1). For example, if construction of the Project requires a travel lane to be blocked at a particular location and if the construction of another project also requires a lane blockage at the same location and time, the cumulative impacts could be major, unless the construction activities and traffic management plans were coordinated and compatible. The addition of vehicle trips from cumulative projects in conjunction with Project construction-related trips would increase overall daily traffic volumes on shared roadways (Impact TRA-2). This would be significant on I-15 and I-215, which operate at LOS F under existing conditions.

Implementing Mitigation Measure TRA-1 (*Construction Traffic Control Plan*), presented in Section C.14.4.2, would mitigate the cumulative contribution of the Project. The Construction Traffic Control Plan, which would be reviewed and approved by Caltrans, the CPUC, and all other affected jurisdictions, requires SCE to define the methods to maintaining close coordination, prior to and during construction, with all agencies responsible for encroachment permits on each affected roadway, to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system. Furthermore, the Plan requires SCE to reduce construction-related trips during peak traffic periods (6:00 to 9:00 a.m. and 3:30 to 6:30 p.m.) on I-15 and I-215. With the implementation of this measure, the Project contribution toward cumulative impacts from temporary roadway disruptions and generated daily traffic would be less than significant (Class II).

Criterion TRA2: Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

The addition of vehicle trips from cumulative projects in conjunction with Project construction-related trips would increase overall daily traffic volumes on CMP freeways in the area (Impact TRA-3). This would be significant on I-15 and I-215, which operate at LOS F under existing conditions. The implementation of Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) would mitigate the cumulative contribution of the Project. The Construction Traffic Control Plan requires SCE to reduce construction-related trips during peak traffic periods (6:00 to 9:00 a.m. and 3:30 to 6:30 p.m.) on I-15 and I-215. With the implementation of this measure, the contribution from the Project toward traffic volumes cumulatively impacting the existing performance of CMP freeways would be less than significant (Class II).

Criterion TRA3: Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

Each cumulative development project listed above within 20,000-feet of either the French Valley Airport or Perris Valley Airport would also have to be evaluated against FAA 7460 regulations pertaining to structures that may affect aviation and airspace safety (Impact TRA-4). Compliance with FAA determinations per Mitigation Measure TRA-2 (*Comply with FAA 7460-1 Determination Recommendations*) ensures the Project's cumulative contribution from structures impacting navigable airspace would be less than significant (Class II).

Criterion TRA4: Substantially increase hazards because of a design feature or incompatible uses.

Cumulative impacts could be substantial if simultaneous construction activities resulted in roadway blockages or other transportation disruptions that affected safe use of a roadway or other surface transportation facility (Impact TRA-5). Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and requires SCE to define the methods to maintaining close coordination, prior to and during construction, with all agencies responsible for encroachment permits on each affected roadway, to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system. Mitigation Measure TRA-1 also requires SCE to reduce temporary motorist hazards in a variety of ways, including ensuring the safe movement of pedestrians and bicycles through work areas and requires coordination with the Burlington Northern Santa Fe Railroad for the necessary rail line crossing. Mitigation Measure TRA-3 (*Repair Roadways and Transportation Facilities Damaged by Construction Activities*) is proposed to ensure any damage and deterioration attributed to the Project would be repaired. With the incorporation of these measures, the Project would have a less than significant contribution to cumulative hazard impacts on transportation facilities (Class II).

Criterion TRA5: Result in inadequate emergency access.

Cumulative impacts could be substantial if simultaneous construction activities resulted in roadway blockages or other disruptions that affected emergency vehicle movements and access (Impact TRA-6). Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and requires SCE to define the methods to maintaining close coordination, prior to and during construction, with all agencies responsible for encroachment permits on each affected roadway, to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system. Mitigation Measure TRA-1 also requires SCE to coordinate in advance with emergency service providers and ensure adequate access and movement of emergency vehicles through work areas. The plan would also ensure SCE provide written notification to property owners and tenants at properties affected by

access restrictions. With the incorporation of this mitigation, the Project would have a less than significant contribution to cumulative impacts on emergency responder access (Class II).

Criterion TRA6: Conflict with adopted policies, plans, or programs supporting regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Cumulative impacts could be substantial if simultaneous construction activities resulted in roadway blockages or other disruptions that affected public transit, bicycle, or pedestrian movements (Impact TRA-7). Mitigation Measure TRA-1 (*Construction Traffic Control Plan*) is proposed and requires SCE to define the methods to maintaining close coordination, prior to and during construction, with all agencies responsible for encroachment permits on each affected roadway, to minimize cumulative impacts of multiple simultaneous construction projects affecting shared portions of the circulation system. Mitigation Measure TRA-1 also requires SCE to coordinate with affected bus transit agencies and include provisions for ensuring detours through all affected pedestrian and bicycle facilities. Project O&M would not restrict transit stops or vehicle movements and would not conflict with sidewalks or designated bicycle paths. With the incorporation of this mitigation, the Project would have a less than significant contribution to cumulative impacts on transit service, bicycle, or pedestrian systems and movement (Class II).

C.14.4.4 Impact and Mitigation Summary

This section summarizes the conclusions of the impact analysis and associated mitigation measures presented in Section C.14.4.2 for the proposed Project. Table C.14-6 lists each impact identified for the proposed Project, along with the significance of each impact.

Table C.14-6. Impact and Mitigation Summary – Transportation and Traffic

Impacts	Significance Conclusion	Reason for Conclusion
TRA-1: Temporary road or travel lane closures could adversely affect traffic flow and congestion, emergency vehicle response, pedestrians/bicyclists routes, and access to adjacent properties.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and all other affected jurisdictions. This Plan would address all means to minimize temporary impacts from roadway and travel lane disruptions.
TRA-2: Traffic related to Project construction and operation could result in unacceptable levels of service on roadways in the Project area.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires SCE to reduce construction-related trips on I-15 and I-215 during peak traffic periods, to the extent feasible.
TRA-3: Construction or operational daily vehicle trips could conflict with Congestion Management Program performance standards.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires SCE to reduce construction-related trips on I-15 and I-215 during peak traffic periods, to the extent feasible.
TRA-4: Project components could affect aviation safety or activities associated with airport facilities.	Class II	**Mitigation Measure TRA-2** (*Comply with FAA 7460-1 Determination Recommendations*) requires SCE to incorporate all FAA recommendations into the final Project design to ensure safety of navigable airspace.
TRA-5: Project activities could increase transportation hazards or damage roads in the Project area.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires a Construction Traffic Control Plan for review and approval by Caltrans, the CPUC, and other affected jurisdictions and methods to reduce temporary transportation hazards. **Mitigation Measure TRA-3** (*Repair Roadways and Transportation Facilities Damaged by Construction Activities*) requires SCE to repair any road damage and deterioration.

Table C.14-6. Impact and Mitigation Summary – Transportation and Traffic		
Impacts	**Significance Conclusion**	**Reason for Conclusion**
TRA-6: Project activities could cause a temporary disruption to emergency response access or vehicle movement.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires SCE coordinates in advance with emergency service providers and ensures adequate access and movement of emergency vehicles occurs through work areas.
TRA-7: Project activities could cause a temporary disruption to public transit operations or designated pedestrian/bicycle paths.	Class II	**Mitigation Measure TRA-1** (*Construction Traffic Control Plan*) requires SCE coordinates with affected bus transit agencies and includes provisions for ensuring detours through all affected pedestrian and bicycle facilities.

Class I: **Significant impact; cannot be mitigated to a level that is not significant.** A Class I impact is a significant adverse effect that cannot be mitigated below a level of significance through the application of feasible mitigation measures. Class I impacts are significant and unavoidable.

Class II: **Significant impact; can be mitigated to a level that is not significant.** A Class II impact is a significant adverse effect that can be reduced to a less than significant level through the application of feasible mitigation measures presented in this EIR.

Class III: **Adverse; less than significant.** A Class III impact is a minor change or effect on the environment that does not meet or exceed the criteria established to gauge significance.

Class IV: **Beneficial impact.** A Class IV impact represents a beneficial effect that would result from project implementation.