

TABLE OF CONTENTS

4.14 TRANSPORTATION AND TRAFFIC	4.14-1
4.14.1 Introduction.....	4.14-1
4.14.2 Methodology.....	4.14-2
4.14.3 Existing Conditions.....	4.14-2
4.14.4 Potential Impacts.....	4.14-10
4.14.5 Project Design Features and Ordinary Construction/Operating Restrictions .	4.14-18
4.14.6 Applicant Proposed Measures.....	4.14-18
4.14.7 Detailed Discussion of Significant Impacts.....	4.14-19
4.14.8 References.....	4.14-19

LIST OF TABLES

Table 4.14-1: Level of Service Calculation Values	4.14-2
Table 4.14-2: Existing Average Daily Trips for Key Project Area Major Roadways.....	4.14-6
Table 4.14-3: Bus Lines within the Proposed Project Area.....	4.14-9
Table 4.14-4: Designated Bikeways within the Proposed Project Area	4.14-10

THIS PAGE IS INTENDED TO BE LEFT BLANK

4.14 TRANSPORTATION AND TRAFFIC

Would the project:		Potentially Significant Impact	Potentially Significant Unless APMs Incorporated	Less than Significant Impact	No Impact
a.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.14.1 Introduction

This section of the PEA describes the existing conditions and potential short- and long-term project-related impacts to transportation and traffic.

Construction generated traffic would be minimal and limited in duration. Operation and maintenance traffic generation would be virtually the same as that of the existing facilities the Proposed Project would be altering or replacing, so the only material traffic impacts relating to traffic generation would be during construction.

A temporary impact has been identified where construction of the underground transmission line within Proposed Project Segment B (Carmel Valley Road) would cause temporary disruption of traffic and reduction in Level of Service (LOS) and emergency vehicle access during construction activities. However, implementation of project design features, adherence to

ordinary construction and operating restrictions, and implementation of APMs would ensure that impacts remain less than significant.

Operation and maintenance of Proposed Project Segment B (new underground transmission line) would require very infrequent access to underground splice vault locations, potentially resulting in short-term and less-than-significant disruption of traffic.

4.14.2 Methodology

Traffic and roadway data for this analysis was collected from online searches, aerial photos, and the Mobility Element of the *City of San Diego General Plan*. The study area includes roadways where construction activities would take place and where roadways would likely be used by project-related traffic, such as for access. Additional information was gathered during site visits and communications with engineering and planning staff of SDG&E. Existing approximate roadway LOS was obtained either from past analysis or planning documents or calculated using traffic count data and stated road capacities. Traffic count data was obtained from published spreadsheets compiled by the SANDAG. Road capacity values were obtained from the Final 2008 Congestion Management Program Update or the *City of San Diego Street Design Manual*.

Calculated LOS values were obtained by dividing the existing average daily traffic (ADT) by the roadway capacity to achieve the volume-to-capacity (v/c) value. LOS was then defined as outlined in Table 4.14-1, Level of Service Calculation Values.

Table 4.14-1: Level of Service Calculation Values

Level of Service	Volume-to-Capacity
A	0.0 to 0.60
B	0.61 to 0.70
C	0.71 to 0.80
D	0.81 to 0.90
E	0.91-01.00
F	Above 1.0

Source: *Highway Capacity Manual (1985)*

4.14.3 Existing Conditions

4.14.3.1 Regulatory Setting

Construction projects that cross public transportation corridors are subject to requirements for local and state agency encroachment permits. Use or obstruction of navigable air space also requires permits. The following summarizes transportation and traffic regulations that are applicable to the construction, operation and maintenance of electric facilities, such as the Proposed Project.

Federal

All airports and navigable airspace not administered by the DOD are under the jurisdiction of the FAA. Federal Regulation Title 14 Section 77 establishes the standards and required notification for objects affecting navigable airspace. In general, projects involving features exceeding 200 feet in height above ground level or extending at a ratio greater than 50 to one (horizontal to vertical) from a public or military airport runway less than 3,200 feet long out to a horizontal distance of 20,000 feet are considered potential obstructions, and require notification to the FAA. In addition, the FAA requires a CAP for operating a helicopter within 1,500 feet of residential dwellings. All new overhead power line and transmission line structures located on MCAS Miramar require notice to the FAA. Notice to the FAA is also required as indicated in the *MCAS Miramar ALUCP* for proposed development 200 feet or more in height for all the communities within the MCAS Miramar AIA, and for any proposed development within Los Peñasquitos Canyon Preserve, Black Mountain Ranch, Rancho Peñasquitos, Miramar Ranch North, Scripps Miramar Ranch and Rancho Encantada.

State

Caltrans has jurisdiction over the state's highway system and is responsible for protecting the public and infrastructure. The use of California state highways for other than normal transportation purposes may require written authorization or an encroachment permit from Caltrans. Caltrans reviews all requests from utility companies that plan to conduct activities within its ROW. Encroachment permits may include conditions or restrictions such as limits to when construction activities can occur within or above roadways under the jurisdiction of Caltrans.

Local

San Diego Association of Governments

SANDAG serves as the regional planning agency for all of San Diego County. SANDAG is responsible for planning and allocating local, state, and federal funds for the region's transportation network. State law and the California Transportation Commission require SANDAG to adopt a 20-year regional transportation plan every four years, which considers improvements to freeways, state highways, transit, and regional bicycle and pedestrian routes. SANDAG prepares and administers the following key plans that relate to regional transportation infrastructure and planning:

- Regional Transportation Plan; and
- Congestion Management Program (CMP).

These plans are generally utilized to identify and address current and projected future transportation planning and congestion management through traffic monitoring, traffic mitigation, transportation system planning, specific transportation project identification and funding, and transportation system management. The Regional Transportation Plan and CMP generally address large-scale transportation planning and projects and do not generally address small-scale construction project planning.

Congestion Management Program 2008 Update

The CMP Update (SANDAG, 2008) designates certain major roadways (freeways, highways, and primary arterials) for monitoring and corrective action. Within the Proposed Project area, the following are CMP system roadways:

- I-5 Freeway (CMP Freeway);
- I-15 Freeway (CMP Freeway);
- I-805 (CMP Freeway);
- SR-56 (CMP Freeway); and
- Scripps Poway Parkway (CMP Arterial).

Pursuant to the 2008 CMP Update, the LOS standard is that all CMP system roadways operate at a minimum of LOS E, unless the CMP designated roadway in question had a lower LOS when the CMP system was originally designated¹. Any roadway segments that do not meet the minimum LOS standard are considered deficient and are subject to Deficiency Plan requirements. It is SANDAG’s current policy that any roadway segment operating at an LOS of F, even if it is grandfathered, be subject to Deficiency Plan requirements.

City of San Diego

The stated purpose of the *City of San Diego General Plan*, Mobility Element is to “improve mobility through development of a balanced, multi-modal transportation network”. The Mobility Element is focused on the current and future relief of traffic congestion, mainly through detailed planning and coordination between transportation and land use planning both at the local and regional level. The Mobility Element goals and policies are aimed to address traffic congestion through planning policy and design guidelines that generally do not apply to construction-related projects that do not result in permanent transportation system demands.

City of Poway

The stated purpose of the *City of Poway General Plan*, Transportation Master Element is to “set forth goals, policies, and strategies that promote effective, safe, and efficient use of existing transportation facilities and development of new facilities, while protecting and managing the natural and commercial resources of the City”. The Transportation Master Element states that all roadways within the City are currently operating within designed capacity.

Metropolitan Transit System

The Metropolitan Transit System (MTS) provides transit services within the City of San Diego, including within the Proposed Project area. The MTS provides bus services, light rail services, and full rail services (including freight). The MTS has a service territory of approximately 570 square miles within the urbanized portions of San Diego County and provides services to approximately three million people. Additional information regarding MTS’s services within the City of San Diego is provided below.

¹ These roadways are often referred to as “grandfathered”.

4.14.3.2 Local Transportation System Overview

The major regional vehicular access to the Proposed Project area is provided via I-5 and I-15. SR-56 is also located within the Proposed Project area and provides additional, east/west regional transportation.

Roadway congestion is expressed using a scale that ranges from LOS A (least congested) to LOS F (most congested). In general, the standard minimum acceptable LOS for roadways within the cities of San Diego and Poway is D, with LOS of E or F not acceptable unless exempted. LOS E and F represent situations where the roadway capacity approximately equals the traffic volume (LOS approaches 1.0). For freeways and highways, the minimum acceptable LOS is typically LOS E.²

Private vehicle transportation is presently the primary mode of travel and the roadway system is classified by hierarchical roadway designations. For the purposes of this analysis, roadway classifications have been simplified to the following:

- Freeways and Highways;
- Arterial Roadways; and
- Collector Streets.

The general size and function of each of these is further described below. Table 4.14-2, Existing Average Daily Trips and LOS for Key Project Area Major Roadways, outlines traffic counts for freeways and highways; arterial roadways; and large collector streets affected by the Proposed Project and outlines calculated or published ADT and LOS values for each of these roadways. Existing traffic count data and published LOS values were obtained from SANDAG³. Where LOS was calculated from ADT, roadway capacities were derived from the *City of San Diego Street Design Manual*. Table 4.14-2 only includes freeways and highways; arterial roadways; and large collector streets which are anticipated to either be utilized for construction traffic or subject to intensive traffic control due to installation of underground cable or otherwise directly affected during construction.

The remainder of this page is intentionally left blank.

² Freeways and highways within the project area are designated within the (San Diego) 2008 Congestion Management Program Update and are subject to different LOS standards according the Congestion Management Program guidelines.

³ SANDAG published values sourced from other entities such as Caltrans and the City of San Diego.

Table 4.14-2: Existing Average Daily Trips for Key Project Area Major Roadways

Roadway (Cross Street)	General Classification (number of lanes)	Jurisdiction/ Location	Average Daily Traffic (ADT)¹	Published or Calculated Existing LOS^{2,3}
I-5 (SR-56)	CMP Freeway (12 lanes)	Caltrans	301,600	E
I-15 (Pomerado)	CMP Freeway (8-14 lanes)	Caltrans	210,600	F
I-805 (I-5)	CMP Freeway (8-12 lanes)	Caltrans	162,000	D
SR-56 (Camino Del Sur)	CMP Freeway (4 lanes)	Caltrans	78,900	A-D
SR-56 (Rancho Peñasquitos)	CMP Freeway (4 lanes)	Caltrans	76,400	A-D
Scripps Poway Pkwy (I-15)	CMP Arterial (6 lanes)	City of San Diego/ City of Poway	42,500	B-C
Pomerado Rd (Spring Canyon Road)	Arterial (4 lanes)	City of San Diego	18,100	A
Rancho Peñasquitos Blvd (Paseo Montril)	Arterial (4 lanes)	City of San Diego	28,700	B-C
Rancho Peñasquitos Blvd (SR-56)	Arterial (4 lanes)	City of San Diego	28,700	B-C
Black Mountain Rd (Carmel Valley Road)	Arterial (4 lanes)	City of San Diego	11,700	A
Black Mountain Rd (Oviedo Street)	Arterial (4 lanes)	City of San Diego	18,300	A
Black Mountain Rd (Park Village Road)	Arterial (4 lanes)	City of San Diego	30,300	C
Park Village Rd (Camino Del Sur)	Collector (4 lanes)	City of San Diego	17,300	B
Carmel Valley Rd (SR-56 Exit)	Arterial (4 lanes)	City of San Diego	13,100	A
Carmel Valley Rd (Camino Del Sur)	Collector (2 lanes, with 2-way turning)	City of San Diego	11,600	C
Camino Del Sur (Carmel Valley Road)	Collector (4 lanes)	City of San Diego	14,200	B
Camino Del Sur (SR-56)	Arterial (4 lanes)	City of San Diego	18,500	A
Carmel Mountain Rd (Vista Sorrento)	Arterial (4 lanes)	City of San Diego	21,200	A

Table 4.14-2 (cont.): Existing Average Daily Trips for Key Project Area Major Roadways

Roadway (Cross Street)	General Classification (number of lanes)	Jurisdiction/ Location	Average Daily Traffic (ADT) ¹	Published or Calculated Existing LOS ^{2,3}
<p>Notes:</p> <p>¹ ADT values given are the most current year (from range of 2006-2010) and correspond with each listed roadway at the listed cross street.</p> <p>² Where ADT values were available for multiple segments for a given roadway, ADT values are given for those segments closest to the Proposed Project area.</p> <p>³ Where published LOS values are used, LOS values represent only segments in the vicinity of the Proposed Project. LOS values for CMP system freeways and arterials correspond to roadway segments, such as the I-5 between the I-805 and Manchester Avenue.</p> <p>Sources: SANDAG, Google Earth, City of San Diego Street Design Manual.</p>				

4.14.3.3 Freeways and Highways

Freeways and highways are designed to carry the highest volume of traffic, and typically connect large populated areas, including cities, utilizing design that completely separates the freeway or highway from lower designated streets and roads through utilization of grade separation and on-and off-ramps. Freeways and highways allow for continuous movement and do not utilize stop lights or signs. The major freeways and highways in the Proposed Project vicinity are the I-5, I-805, I-15 and SR-56. Locations and proximity to the Proposed Project location are shown in Appendix 3-B.

4.14.3.4 Arterial Roadways

An arterial road is a major or main route with traffic capacity just below that of highways. Arterial roads are designed to transfer traffic between neighborhoods, communities, and even cities, and have intersections (stop lights) with collector and other arterial streets. Arterial roads are sometimes sub-divided into major arterials and prime arterials, but simply defined as arterials within this analysis. Key arterial roadways that intersect the Proposed Project area as well as arterial roads that could be utilized by the Proposed Project related traffic are listed below and the locations are shown in Appendix 3-B:

- Pomerado Road
- Scripps Poway Parkway
- Spring Canyon Road
- Sabre Springs Parkway
- Poway Road
- Rancho Peñasquitos Boulevard
- Carmel Mountain Drive
- Black Mountain Road
- Camino Del Sur⁴
- Carmel Mountain Road⁴
- Carmel Valley Road⁴

⁴ Note that Camino del Sur, Carmel Mountain Road, and Carmel Valley Road would also be classified as Collector Streets in certain portions of the Proposed Project Area.

4.14.3.5 Collector Streets

A collector street has a lower traffic capacity than any other type road, and for the purposes of this analysis includes local streets. Collector streets function as connecting road links between arterial roads and local streets to lead traffic throughout communities and occasionally to freeways. Local streets generally connect collector streets with adjacent parcels (end uses). There are numerous collector streets within the Proposed Project area, including (but not limited to) the following collector roads that either intersect the Proposed Project alignment or that could be utilized by the Proposed Project related traffic (collector streets are depicted on Appendix 3-B):

- Stonebridge Parkway
- Oviedo Way & Oviedo Street
- Spring Canyon Road (restricted)⁵
- Parkway Center Drive
- Stowe Drive
- Wild Meadow Place
- Evening Creek Drive
- Meritage Court
- Scripps Summit Drive/ Scripps Summit
- Court Torrey Santa Fe Road
- Park Village Road
- Preserve Way

4.14.3.6 Airports

There are four airports within the City of San Diego, including the San Diego International Airport, MCAS Miramar, Brown Field, and Montgomery Field. In relation to the Proposed Project, the closest airports are MCAS Miramar (approximately 4 miles south of the Proposed Project) and Gillespie Field (located approximately 6.5 miles south-southeast of the Sycamore Canyon Substation within unincorporated San Diego County). MCAS Miramar is a military airfield not open to public or private operations and the Gillespie Field is a public municipal airport.

In addition, the McClellan-Palomar Airport is located approximately 12.3 miles north of the Proposed Project (within the City of Carlsbad) and the Montgomery Field is located approximately 9 miles southwest of the Proposed Project (within the City of San Diego).

4.14.3.7 Public Transportation

Bus Lines

Bus services in the Proposed Project area are provided by MTS. MTS operates 93 fixed route bus lines within the City of San Diego and surrounding areas (3,241 square mile service territory) with a fleet of over 4,500 buses.

There are seven bus routes within the Proposed Project area, as outlined in Table 4.14-3, Bus Lines within the Proposed Project Area.

⁵ Spring Canyon Road is utilized for access to the Sycamore Canyon Substation as well as Structure Nos. P1 through P4. Spring Canyon Road is located on MCAS Miramar and is restricted from public access.

Table 4.14-3: Bus Lines within the Proposed Project Area

Proposed Project Segment	Roadway/ Route	Bus Line(s)
Segment A	I-15	810, 820, 850, 860, 880
	Poway Road	844
	Carmel Mountain Road	20, 850
Segment B	None	
Segment C	None	
Segment D	None	
Source: MTS, 2011		

Trolley and Light Rail Lines

MTS operates trolley and light rail transit services within the City of San Diego. MTS operates four trolley lines and one light rail line that include over 55 miles of track and over 53 stations. There are no trolley routes or light rail lines within the Proposed Project area.

Bicycle Facilities

Bicycle facilities within the City of San Diego are developed and maintained according to the City's *Bicycle Master Plan*. The *Bicycle Master Plan* includes network maps, policies, and facility design elements relating to the creation and maintenance of the City's bicycle transportation system. Within the City of San Diego, there are generally three types of bikeways, as follows:

- Class I (Bike Paths): Provides for non-motorized modes of transportation only. Bike paths provide paved ROWs completely separated from streets, roads, and highways.
- Class II (Bike Lanes): Provides paved access for bikes on outer edge of existing roadways and highways. The bike lane is usually only demarcated by painting or striping and is not accessible to pedestrians.
- Class III (Bike Routes): Provides paved access for bikes in common area accessible to pedestrian and motorized traffic. Bike access is denoted only by signage and no physical barrier is provided between bike and other allowable traffic.

Table 4.14-4, Designated Bikeways within the Proposed Project Area, lists the designated bikeways that intersect, or are located immediately adjacent to the Proposed Project alignment. The location (street) and designated class are listed, as appropriate.

Table 4.14-4: Designated Bikeways within the Proposed Project Area

Proposed Project Segment	Bikeway Location	Bikeway Class Designation
Segment A	Stonebridge Parkway	Class II (Bike Lane)
	Pomerado Road	Class II (Bike Lane)
	Scripps Poway Parkway	Class II (Bike Lane)
	Poway Road	Class II (Bike Lane)
	I-15	Class I (Bike Path)
	SR-56	Class III (Bike Route)
	Carmel Mountain Drive	Class II (Bike Lane)
Segment B	Carmel Valley Road	Class II (Bike Lane)
Segment C	SR-56	Class I (Bike Path)
Segment D	East Ocean Air Drive	Class II (Bike Lane)
Sources: <i>City of San Diego Bicycle Master Plan, Final Draft, July 2013; City of Poway General Plan - Bicycle Element.</i>		

4.14.4 Potential Impacts

The Proposed Project involves the construction of new transmission line facilities and the replacement or relocation of existing power line and transmission line facilities as needed in order to accommodate installation of the new 230 kV transmission line. All proposed overhead facilities would be located within existing SDG&E ROW and utility corridors and proposed underground facilities would be located within an existing franchise position (city street). The Proposed Project would involve construction activities that would temporarily increase existing traffic, affect one existing roadway due to installation of underground transmission line, and affect other roadways during stringing of new conductor. Due to the fact that the transmission lines, power lines and substations included as part of the Proposed Project utilize existing utility corridors, structures, and a franchise position, operation and maintenance activities for the Proposed Project (especially those generating traffic) would largely mirror current operation and maintenance conditions. Therefore, the traffic analysis herein is focused on potential construction-related impacts to traffic and transportation.

4.14.4.1 Significance Criteria

Standards of impact significance were derived from Appendix G of the *CEQA Guidelines*. Under these guidelines, the Proposed Project could have a potentially significant impact to transportation and traffic if it would:

- a) 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;

- b) 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;
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks;
- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Result in inadequate emergency access; or
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.14.4.2 Question 14a - 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?

Construction – Less than Significant Impact

Impacts to LOS from Construction-Related Traffic

The CMP and the City of San Diego have acceptable LOS standards for roadways within the Proposed Project area. These LOS standards can constitute a measure of the existing performance of the circulation system, against which the Proposed Project's effects are measured. Construction of the Proposed Project would result in minor, temporary increases in ADT along road segments where construction personnel, equipment, and other construction-related trips would access work areas (refer to Appendix 3-B for all work areas and roadways within the Proposed Project area).

Due to the nature of transmission and power line construction, multiple work areas are needed and construction traffic is largely spread out among existing roadways and SDG&E unpaved access roads. The number of trips generated by Proposed Project construction would vary by Segment and task type. A typical structure site (such as for Segments A and D of the Proposed Project) may only require six workers at one time and only as many daily trips. For construction within environmentally sensitive areas (e.g., those containing biological, cultural, or other resources), monitoring may be required, typically during clearing and grading activities. Where excavation is occurring, trips can also be generated for the import or export of soil. Construction of Segment B (underground transmission line) would require the highest number of trips for hauling, up to approximately 35 trips per day, per crew. Other construction trips may be generated from materials delivery, inspectors and foreman, as well as SDG&E construction oversight personnel.

Equipment brought to each structure site during construction (a drill rig, for example) would also generate trips. However, equipment would typically remain at each site until work was complete (typically no more than a few days for most aspects of construction) and thus construction equipment would typically not represent a daily source of trips.

Construction workers typically meet at construction staging yards before mobilizing to construction sites, often in varying locations, in order to complete safety related tailgates and planning activities. Therefore, the highest level of combined worker traffic would often occur at the construction staging yards. On a worst case day, approximately 70 daily trips (15 to the site and 15 back for workers and 40 trips for hauling) could be required at a single construction site, but typical daily totals would be closer to 10 (no hauling) or 30 when significant excavation is occurring (such as trenching along Segment B).

Construction of the Proposed Project would involve construction at multiple sites (for example there may be two foundation crews working along Segment A, and another two working along Segment B), as well as on each of the four segments at one time. However, the construction traffic generated for work on Segment A would typically not be cumulatively considerable with traffic generated for work along Segment D as different construction staging yards would likely be utilized, and different streets would be utilized as the specific construction access route. Therefore, even if max construction for the entire project resulted in 220 daily trips (100 workers [two ways – 200 trips] plus worst case excavation hauling on Segment B [40 trips]), these trips would be dispersed among multiple access routes such that any given street utilized for construction access would only experience a fraction of the total project-related traffic.

In addition, the traffic that would be generated by the Proposed Project would be negligible compared to existing ADTs on public roadways and freeways that would be used for construction access (refer to Section 4.14-3 and Table 4.14-2). Finally, with the exception of the I-15 freeway, all public roadways that would likely be utilized for construction access currently operate at acceptable LOS (A through D for city streets and A through E for CMP designated roadways and freeways), with the exception of the I-15 (LOS F). With respect to the I-15, the minimal incremental increase and temporary nature of Proposed Project related trips is not anticipated to result in a significant deterioration of existing LOS conditions on the I-15. Therefore, impacts relating to construction generated traffic are anticipated to be less than significant as the Proposed Project would not result in a conflict with existing LOS standards or deterioration of any existing LOS to substandard levels.

Impacts to LOS from Construction of Underground Transmission Line within Roadways

The CMP and the City of San Diego have acceptable LOS standards for roadways within the Proposed Project area. These LOS standards can constitute a measure of the performance of the circulation system, against which the Proposed Project's effects are measured. Segment B of the Proposed Project includes installation of new underground transmission line within an existing roadway (Carmel Valley Road), which would potentially require temporary lane closures on Carmel Valley Road during construction. The easternmost segment of the new underground transmission line would be installed within Black Mountain Ranch Community Park, which would also require temporary closure to the park entrance driveway off Carmel Valley Road. Active construction of the new underground segment of transmission line through Carmel Valley

Road (installation of vaults and duct package) would last approximately six months and temporary lane closures would be required during this time.

The significance of potential impacts to traffic and circulation due to the construction within Carmel Valley Road was evaluated considering the following factors:

1. Duration of construction activities,
2. The LOS of the affected roadway,
3. Design of the underground transmission line, and
4. Nature of roadway and existing traffic.

The proposed underground transmission line route through Carmel Valley Road is being designed, where feasible, to utilize a large median that currently exists through much of the roadway along the proposed route (refer to Appendix 3-B). Utilization of the median would minimize the potential for lane closures along Carmel Valley Road during construction⁶. Based upon the current preliminary design, approximately 1.9 miles of Segment B would be located within the existing median.

In addition, traffic control plans would be prepared (and approved by the City of San Diego, as needed) for all work conducted within Carmel Valley Road or that would require traffic control (i.e., lane closures) along Carmel Valley Road. Encroachment permits (or equivalent) would be required for all work in a city roadway ROW. The approved traffic control plans would describe lane closures and other methods for reducing adverse construction-related traffic impacts. One common traffic control measure often included within encroachment permits is to limit, or direct the hours of construction such that period of high traffic volume (often peak AM and PM hours) are avoided or minimized. This is often accomplished by limiting construction within roadways to the approximate hours of 9 AM to 4 PM. The preparation and implementation of traffic control plans effectively directs work within streets, including lane closures, such that impacts to traffic flow are minimized, especially during those times of the day where traffic volumes are the highest. This measure is often used and is most effective in areas where ADT is largely generated from residential land uses and thus traffic trips are largely related to work and school traffic. Carmel Valley Road connects to almost exclusively residential land uses, and thus traffic along Carmel Valley Road would likely be concentrated within the peak AM and PM hours. Therefore, traffic control measures would provide effective reduction in the impact to LOS during construction of Segment B of the Proposed Project. Furthermore, Carmel Valley Road currently operates at acceptable LOS of A-C, thus the capacity of Carmel Valley Road is currently adequate for the number of daily trips. Therefore, while construction of Segment B of the Proposed Project would potentially result in lane closures along Carmel Valley Road, the design of the route (utilization of the oversized median where feasible), development of approved traffic control plans, and the nature of existing traffic along Carmel Valley Road would ensure that impacts to traffic flow and congestion (LOS) along Carmel Valley Road would be less than significant.

⁶ Carmel Valley Road was designed for eventual expansion and thus contains an oversized median for much of the proposed underground transmission line route. The oversized median would eventually be utilized for the expanded Carmel Valley Road (i.e. additional lanes). The proposed underground transmission line would be designed and constructed in a manner that would not hinder the eventual buildout of Carmel Valley Road.

In addition, APM TR-1 would ensure that SDG&E would coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles, to ensure that emergency vehicle access is maintained, and that impacts to emergency-related traffic flow are minimized.

Operation & Maintenance – Less than Significant Impact

Operation and maintenance of the Proposed Project would occur in the same or essentially the same locations as it occurs today under baseline, existing conditions, and there would not be any new impacts resulting from operation and maintenance of the Proposed Project except in relation to the new underground line proposed as Segment B. Operation and maintenance of Segment B would result in inspection activities at splice vault locations along Carmel Valley Road on 3-year cycles. While these operation and maintenance activities may require encroachment permits and traffic control measures, any impact to local traffic conditions is anticipated to be less than significant due to the use of the median, the frequency and duration of these events, the timing of work to avoid peak hours, and the effectiveness of traffic control. As a result, there would be no significant long-term impacts to the existing LOS standards or other adopted traffic control standards as a result of operations and maintenance of the Proposed Project.

4.14.4.3 Question 14b – 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 highway?

Construction – Less than Significant Impact

The CMP 2008 Update includes four roadways within the Proposed Project vicinity within the CMP system, including the I-5, I-15, SR-56, and Scripps Poway Road. Only the I-15 currently operates at an unacceptable LOS (F) while the other three operate at LOS E or higher.

As previously discussed in the response to Question 14a, the Proposed Project's construction-related traffic would result in a minimal, temporary increase in the existing daily traffic spread throughout the Proposed Project area.

The Proposed Project's maximum temporary increase of approximately 220 daily vehicle trips would not significantly increase congestion or cause the roadways to operate at a LOS lower than they currently operate. The four CMP system roadways carry high to very high volumes of vehicles, and the incremental increase the Proposed Project would result in would be insignificant (0.3 to 0.07 percent increase in ADT). Furthermore, increases in ADT from Proposed Project construction would be temporary and are not anticipated to result in any permanent effect on the CMP system or prescribed corrective measures. Therefore, construction activities would not conflict with any relevant CMPs or any other standards within the Proposed Project area and impacts would be less than significant.

Operation & Maintenance – Less than Significant Impact

As described previously in Section 4.14.4.2, because operation and maintenance of the Proposed Project would occur in the same or essentially the same locations as occur today under baseline, existing conditions, there would not be any new impacts resulting from operation and

maintenance of the Proposed Project, except for minor and infrequent impacts relating to the operation and maintenance activities at new splice vault locations along Segment B. As a result, there would be no significant long-term impacts to the existing LOS standards, CMP designations, or other adopted traffic control standards as a result of operations and maintenance of the Proposed Project.

4.14.4.4 Question 14c – Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Construction – Less than Significant Impact

As described in Section 3.4.8, Helicopter Usage during Transmission Line Construction, helicopters are anticipated to be used as a construction tool during the stringing of overhead conductor cable and potentially other transmission line construction activities associated with the Proposed Project. Helicopter flights would generally be limited to within SDG&E's existing ROW and adjacent areas, except where the helicopters would travel to and from local airports or Proposed Project incidental landing areas⁷. It is anticipated that helicopters would only be utilized during daylight hours. Transmission line work would temporarily increase air traffic and encroach on navigable air space during construction; however, SDG&E or its contractor would coordinate flight patterns with local air traffic control (airports) and the FAA (Notice to Airman) prior to and during construction to prevent any adverse impacts due to the slight increase in air traffic. In addition, helicopter utilization would be compliant with applicable usage permits including a requirement for preparation of a CAP in compliance with FAA requirements (refer to Section 3.8). As a result, no impact to air traffic is anticipated. It is anticipated that helicopters utilized for the Proposed Project would be staged out one of the local airports (such as McClellan Palomar, Montgomery, and Gillespie).

The Montgomery Field is the closest public airport to the Proposed Project, located approximately 9 miles south southeast of the Sycamore Canyon Substation. The Proposed Project is not subject to any airport land use approval because of its distance from existing airports. However, due the location of Proposed Project facilities (Sycamore Canyon Substation and Structure Nos. P1, P2, and P3) on MCAS Miramar, the FAA will be notified for all new facilities located on MCAS Miramar. Additionally, the FAA will be provided notification for segments of the Proposed Project that fall within the applicable communities within the MCAS Miramar AIA, as required by the *MCAS Miramar ALUCP*. The Proposed Project, while partially located on MCAS Miramar, is located over 4 miles from the MCAS Miramar airport facility and is not anticipated to create any adverse effect on the operation of MCAS Miramar. None of the Proposed Project structures or equipment used to construct the Proposed Project are anticipated to be taller than 200 feet⁸. Therefore, no FAA clearance is anticipated to be required and no impacts are anticipated. However, the FAA will be consulted in relation to aerial marking and

⁷ It is anticipated that the Proposed Project staging yards may be utilized for incidental landing areas. Helicopters could also pick up conductor or other material from stringing sites or pole construction sites that contain sufficient area, typically a minimum 150-foot by 150-foot area.

⁸ Individual spans of transmission or power line may exceed 200 feet due to topographic conditions and would therefore require aerial marking (marker balls). The FAA will be noticed for all spans anticipated to be over 200 feet above ground level and aerial marking will be implemented pursuant to specific direction and approval of the FAA.

lighting and SDG&E will implement aerial marking and lighting as directed by the FAA. Any potential impact to air traffic from new overhead structures or facilities would be less than significant following compliance with FAA regulations, including any requirements related to aerial marking.

Operation & Maintenance – No Impact

With respect to air traffic, operation and maintenance of the Proposed Project would occur in the same or essentially the same locations as they occur today under baseline, existing conditions⁹. Therefore, there would not be any new impacts resulting from operation and maintenance of the Proposed Project related to air traffic. SDG&E does not anticipate that helicopter use beyond that currently required for their existing facilities would be necessary to operate or maintain the Proposed Project. As a result, there would be no impact to air traffic due to the operation and maintenance of the Proposed Project.

4.14.4.5 Question 14d – Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction – Less than Significant Impact

Construction of the Proposed Project would not result in any permanent modification to existing public roadways or other transportation infrastructure. Proposed Project work in public road ROWs could increase hazards if appropriate safety measures are not in place, such as guard structures, proper signage, safety cones, flaggers, and other traffic control measures. However, SDG&E always utilizes guard structures for conductor stringing over roadways. In addition, SDG&E would be required to obtain encroachment permits in order to complete work within or over roadways. The encroachment permits would include traffic control plans that would ensure work is completed in a safe manner, in accordance with applicable local regulations, including proper signage, safety cones, flaggers, and other traffic control measures as necessary. With traffic control plans meeting jurisdictional requirements for traffic safety, the work would not be incompatible with traffic or substantially increase traffic hazards.

Operation & Maintenance – Less than Significant Impact

Because operation and maintenance of the Proposed Project would occur in the same or essentially the locations as they occur today under baseline, existing conditions, there would generally not be any new impacts resulting from operation and maintenance of the Proposed Project. Operation and maintenance of Segment B of the Proposed Project would result in a requirement for periodic access to approximately ten new underground splice vaults. Access to these splice vault locations could result in short-term alterations to traffic flow along Carmel Valley Road. However, access to the splice vault locations would be very infrequent (one visit every three years), would last only approximately one day per visit, and would be conducted pursuant to City of San Diego encroachment permit requirements, including traffic control measures. As a result, impacts would be less than significant.

⁹ Note that while Segment B would require infrequent operation and maintenance at the ten splice vault locations, such activities would not involve the use of helicopters and would therefore not affect air traffic in any way.

Access for the operation and maintenance activities would be provided from existing public roads and existing SDG&E unpaved access roads. With exception of the Segment B as described above, this access would be the same as current access, and as such would not result in any impact compared to existing conditions.

4.14.4.6 Question 14e – Result in inadequate emergency access?

Construction – Less Than Significant Impact with Implementation of APMs

Emergency access would not be directly impacted during construction because all streets would remain open to emergency vehicles throughout construction. Increased vehicle traffic during construction and temporary lane closures during the undergrounding of new underground trench packages would occur. Although this can impact emergency access, the increase in vehicle traffic during construction would be minor, is not expected to significantly affect response times, and construction within public roadways would be conducted pursuant to approved traffic control plans that would ensure emergency vehicle access is preserved during construction activities. In addition, to ensure that emergency response access is maintained, SDG&E would coordinate with all of the local emergency response agencies during all construction within roadways (APM TR-1). Thus, impacts would be less than significant.

Operation & Maintenance – Less than Significant Impact

As discussed previously, because operation and maintenance of the Proposed Project would occur in the same or essentially the locations as they occur today under baseline, existing conditions, there would generally not be any new impacts resulting from operation and maintenance of the Proposed Project. However, operation and maintenance of Segment B would require access to the approximately ten new underground splice vaults located along Carmel Valley Road. Access to these splice vaults could impact emergency vehicle access. However, scheduled access to the splice vaults would occur very infrequently (once every three years) and would be subject to local encroachment permit and traffic control requirements from the City of San Diego. As part of the encroachment permit process, appropriate traffic control measures (as approved by the City) would be required to be implemented during access of the splice vaults whenever traffic flow could be affected. Therefore, any impacts to emergency vehicle access that could occur as a result of operation and maintenance of the Proposed Project would be less than significant due to adherence to local roadway encroachment and traffic control requirements and the low frequency of required operation and maintenance.

4.14.4.7 Question 14f – Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation?

Construction – Less than Significant Impact

Construction of the Proposed Project would occur almost exclusively within existing SDG&E ROW areas and within franchise position within a city street. The Proposed Project would not involve activities that would conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, including bus transportation in the area. Short term disruption to one Class II Bike Lane would occur during construction of Segment B of the Proposed Project (Carmel Valley Road). However, the majority of Segment B would be

installed near the center of the existing roadway (mostly within a large median), such that the bike lane would experience minimal affects. In addition, work within Carmel Valley Road would be conducted pursuant to traffic control plans and encroachment permits that would include measures for diverting bicycle traffic as an element of traffic control. Therefore, impacts are anticipated to be temporary and less than significant.

Operation & Maintenance – No Impact

The operation and maintenance activities for the Proposed Project would generally not change from the current practices, with the minor exception of periodic maintenance and inspection on Segment B, which is proposed to be located in an underground position within Carmel Valley Road. Operation and maintenance of the overhead segments of the Proposed Project (Segment A, C, and D) would not substantially increase from what occurs under current, baseline conditions. Rail, bus, and bicycle traffic are not affected by current operation and maintenance activities associated with the existing overhead power and transmission lines located within Proposed Project ROW; and there would be no change to these activities as a result of the Proposed Project. Therefore, no impact to rail, bus, and bicycle traffic are anticipated related to operation and maintenance of the new overhead transmission line or relocated power or transmission lines.

Operation and maintenance of the new underground segment of transmission line would require infrequent access of the splice vaults, which result in the potential requirement for traffic control measures and temporary lane closures along Carmel Valley Road that could affect transit and alternative modes of transportation. However, these operation and maintenance activities (refer to Section 3.7) would occur very infrequently (one visit every three years), would last only approximately one day per visit, and would comply with applicable encroachment permit and traffic control requirements. Therefore, ongoing operation and maintenance of the new underground segment of transmission is not anticipated to result in impacts to rail, bus, bicycle, or other forms of public transportation.

4.14.5 Project Design Features and Ordinary Construction/Operating Restrictions

With implementation of the project design features and ordinary construction restrictions (as described within Section 3.8) potential impacts relating to construction traffic, including impacts resulting from construction of Segment B, would remain less than significant.

4.14.6 Applicant Proposed Measures

The Proposed Project has no potentially significant impacts relating to transportation and traffic that are not adequately mitigated through compliance with existing laws, regulations, project design features, and ordinary construction/operating restrictions, except for potential impacts to emergency service access during construction of Segment B. Construction of Segment B would be completed in conformance with APM TR-1, as outlined below.

TR-1: SDG&E will coordinate with local emergency response agencies during all construction within Carmel Valley Road. Coordination with local emergency response agencies (in addition to project design features and ordinary construction/operating restrictions detailed in Section 3.8) would ensure that impacts to emergency access are less than significant.

4.14.7 Detailed Discussion of Significant Impacts

Based on the preceding analysis, no significant impacts relating to transportation and traffic are anticipated from the Proposed Project.

4.14.8 References

City of Poway, 2010, *General Plan Transportation Master Element, Bicycle Element*.

City of San Diego. 2002a. *Plan Report for the City of San Diego Bicycle Master Plan*.

City of San Diego. 2002b. *City of San Diego Street Design Manual*.

City of San Diego. 2007. *Final Programmatic Environmental Impact Report for the City of San Diego General Plan*.

City of San Diego. 2008. *General Plan Mobility Element*.

City of San Diego. 2013. *City of San Diego Bicycle Master Plan – Final Draft*. July 8, 2013.

Google Earth. 2013. Site accessed October 2013.

Metropolitan Transit System (MTS). 2011. *MTS Bus Operations Fact Sheet*.

Metropolitan Transit System (MTS). 2013 a. *Metropolitan Transit System (MTS) Fact Sheet*.

Metropolitan Transit System (MTS). 2013 b. *MTS – San Diego Trolley, Inc. Fact Sheet*.

Metropolitan Transit System (MTS). 2013 c. *San Diego & Arizona Eastern (SD&AE) Railway Fact Sheet*.

San Diego Association of Governments (SANDAG). 2008. *Final 2008 Congestion Management Program Update*.

San Diego Association of Governments (SANDAG). 2013. *San Diego County Regional Transit Map*.

San Diego County Regional Airport Authority (San Diego). 2008. *MCAS Miramar Airport Land Use Compatibility Plan*. Adopted in October 2008 (amended in December 2010 and November 2011). Online: http://www.san.org/documents/land_use/alucps/MCAS_Miramar_ALUCP_2011_Amendment.pdf. Site visited on November 14, 2013.

Transportation Research Board. 1985. *Highway Capacity Manual*.