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D.9 Transportation and Traffic

This section provides a description of the existing transportation and traffic system and analyzes the transportation and traffic impacts related to the Proposed Project and alternatives. Sections D.9.1 and D.9.2 provide a description of the regional setting and the environmental setting. The applicable regulations and the significance criteria are described in Sections D.9.3 and D.9.4. Analyses of the impacts of the Proposed Project and alternatives are presented in Sections D.9.5 through D.9.7.

D.9.1 Regional Setting and Approach to Data Collection

Figure B-1 (in Section B) shows the proposed transmission line route and substation locations in relation to the regional roadway network. The Sunrise Powerlink Project (SRPL) would be located between the El Centro area of Imperial County and northwestern San Diego County. The transmission line would cross Interstate 8 (I-8) in Imperial County, and State Route (SR) 79, SR78, SR67, and I-15 in San Diego County. In addition, the route would cross a number of county, local, unnamed, and unimproved roads.

Data for the transportation network were collected and analyzed from the following sources: highway maps; route alignment maps; and other maps from various reports and websites of the affected State and local agencies. Traffic volume data were obtained from agency websites and databases (see Section D.9.9, References, for the complete list of data sources). Lane information was obtained from aerial photographs, local government agencies, public maps, and field reconnaissance.

Roadways have different classifications depending on their purpose and level of traffic:

- *Collector*: Streets that collect and distribute traffic to and from major highways and local streets. Collector streets also serve secondary traffic generators such as shopping and business centers, schools, parks and high density or large-scale residential areas (City of El Centro Circulation Element, 2006).
- *Prime Arterial*: A main highway primarily for through traffic usually on a continuous route
- *Highway*: A main public road, especially one connecting towns and cities
- *Freeway*: A divided arterial highway with full control of access and with grade separation at intersections
- *State Route*: A roadway designated by state law as part of the Freeway and Expressway System of the California State Highway Code
Major Collector: A four-lane facility, with a design speed of 25-35 mph on a typical right-of-way of 84 feet without bicycle lanes or 96 feet with two 6-foot-wide bicycle lanes.

Typically, large cities, counties, and Caltrans will collect traffic data on these larger roadways. Local and minor roads frequently have no data available because the level of traffic does not warrant data collection. In the information provided in this Section, ND is used in tables to indicate that no data are available.

D.9.2 Environmental Setting for the Proposed Project

The environmental setting includes the roadways, transit systems, railroads, and airport facilities that would be directly or indirectly affected by construction and operation of the Proposed Project. The data presented in the tables below include the name of the roadway, the responsible jurisdiction, the number of

lanes, the average daily traffic (ADT) volumes, the Proposed Project milepost (MP) of the crossing, and the orientation of the roadway to the proposed route. In addition to the roadways listed in the tables, there are numerous unpaved and/or unnamed roads that would also be affected by the Proposed Project.

Trucks will deliver supplies, material, and equipment. These deliveries will be to specific sites as well as to laydown and assembly yards, as required. Cars and light trucks will be used by workers to get to construction sites or personnel assembly points. The maximum estimated number of individuals required for construction labor would not exceed 800, with the majority of that labor required to install transmission tower foundations. The maximum number of individuals would be needed for an approximately 26-month period, over which time the majority of foundation construction would occur. Figure B-43 in Section B depicts the total construction labor force by month for the Proposed Project. SDG&E has stated that a maximum of 125 temporary workers would be needed within any one link during this peak construction period. During operation and maintenance, the maximum total workforce would be approximately 20 permanent employees.

Helicopters would be used to support construction activities in areas where access is limited (e.g., no suitable access road, limited pad area to facilitate onsite structure assembly area) or there are environmental constraints to accessing the project area with standard construction vehicles and equipment. Project activities potentially facilitated by helicopters may include delivery of construction laborers, equipment and materials to structure sites, structure placement (except tubular steel poles), hardware installation, and wire stringing operations. It is anticipated that helicopters would be used for project activities in portions of the Anza-Borrego, Central, and Inland Valley Links. Towers requiring helicopter construction have been preliminarily identified as those between:

- MP 77.9 to MP 83.5 (41 towers)
- MP 92.6 to MP 97.6 (11 towers)
- MP 100.2 to MP 103.5 (19 towers)
- MP 123.4 to MP 136.3 (40 towers)

All helicopter construction activities would be based at fly yard, which is a project-material staging area. Two fly yards are anticipated to be required, one at Ocotillo Airstrip at Ocotillo Wells north of SR78 and one at the proposed East Central Substation site.

D.9.2.1 Imperial Valley Link

This section describes the potential roadways that would be affected by the Proposed Project in the Imperial Valley Link. The major regional transportation route in this area is I-8, which is under the jurisdiction of the California Department of Transportation (Caltrans). Additionally, State Routes 86 and 78 are under Caltrans' jurisdiction. SR80 is under Imperial County jurisdiction. All of the other roadways are under the jurisdiction of Imperial County, or are private roads. Table D.9-1 lists the roadway, classification, traffic volumes, and the position of transmission lines. Figure B-3 is a map of the Imperial Valley Link.

I-8 is the main east-west freeway in Imperial and San Diego Counties. Within Imperial County, I-8 is a four-lane divided highway with a posted speed limit of 70 miles per hour (mph). The Proposed Project would cross I-8 approximately 1.0 mile east of the Dunaway Road interchange (MP 6) as an overhead transmission line continuing through private agricultural land.

Imperial County Highway SR80 (Evan Hewes Highway) is a paved two-lane east-west national highway (prime arterial) of which the California terminus starts in southwestern Imperial County, west of the unincorporated community of Seeley. The Proposed Project (MP 7.1) intersects Imperial County Highway S80 as an overhead transmission line west of the outskirts of Seeley, approximately 1.0 mile east of Dunaway Road.

SR86 is a paved two- to four-lane divided highway extending from northwestern Imperial County through the communities of Brawley and El Centro and terminating its junction with SR111, just north of the border crossing in Calexico. West of Brawley, the Proposed Project (MP 37.7) would diverge from the Imperial Irrigation District (IID) 161 kV transmission line ROW and would turn westerly, continuing to follow SR78 as an overhead transmission line.

SR78 (Ronald Packard Parkway) is a paved two- to four-lane divided highway extending from Ocean-side in San Diego County, continuing through Brawley in Imperial County and terminating at the junction of Interstate 10 at Blythe in Riverside County. The Proposed Project (MP 40) would follow SR78 to MP 47.1, where the Proposed Project would turn south, continuing as an overhead transmission line.

Payne Road is an unclassified roadway in the County General Plan Circulation Element. Payne Road is an unpaved east-west two-lane agricultural road in western Imperial County. The Proposed Project (MP 14.3) would intersect Payne Road west of the Fillaree Canal as an overhead transmission line.

Huff Road is classified as a Major Collector in the General Plan Circulation Element. Huff Road is located just north of Wheeler Road and is a paved two-lane north-south road approximately 1.5 miles west of the unincorporated community of Seeley. The Proposed Project (MP 15) would intersect Huff Road just north of the Fillaree Canal as an overhead transmission line.

Wheeler Road is an unclassified roadway in the County of Imperial Circulation Element. Wheeler Road is an unpaved east-west two-lane agricultural road in western Imperial Valley. The Proposed Project (MP 15.3) would intersect Wheeler Road west of the Fillaree Canal as an overhead transmission line.

Edgar Road is an unclassified roadway in the County of Imperial Circulation Element. Edgar Road is an unpaved east-west two-lane agricultural road in western Imperial Valley. The Proposed Project (MP 16.2) would intersect Edgar Road approximately one mile west of Forrester Road as an overhead transmission line.

Imler Road is classified as a Major Collector in the County of Imperial Circulation Element. Imler Road is a paved east-west two-lane road in the western area of Imperial Valley. Imler Road traverses the U.S. Naval Reservation (Desert Range). The Proposed Project (MP 21.9) would intersect Imler Road approximately 0.5 miles east of the easternmost boundary of the Desert Range as an overhead transmission line.

Table D.9-1. Public Roadways along the Proposed Route – Imperial Valley Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
Interstate 8 (Imperial County)	Caltrans	Freeway	4	2005	13,300	6.0	Overhead
State Route 80 (near Plaster City)	Imperial County	Prime Arterial	2	2006	920	7.1	Overhead
State Route 86	Caltrans	Highway	2-4	2005	12,100	37.7	Overhead
State Route 78 (near junction of SR86)	Caltrans	State Route	2	2005	920	40.0-47.1	Overhead
Local Roadways							
Payne Road	Imperial County	N/A	Unpaved	ND	ND	14.3	Overhead
Huff Road	Imperial County	Major Collector	2	2005	1,160	15.0	Overhead
Wheeler Road	Imperial County	N/A	Unpaved	ND	ND	15.3	Overhead
Edgar Road	Imperial County	N/A	Unpaved	ND	ND	16.2	Overhead
Imler Road	Imperial County	Major Collector	2	2005	3,000	21.9	Overhead

Source: California Department of Transportation; County of Imperial.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

D.9.2.2 Anza-Borrego Link

The potential roadways that would be affected by the Proposed Project in the Anza-Borrego Link are described below and presented in Table D.9-2. The regional transportation route in this area is SR78, which is under the jurisdiction of Caltrans. All of the other roadways are under jurisdiction of Imperial or San Diego Counties. Figure B-4 is a map of the Anza-Borrego Link.

SR78 is a paved two- to four-lane, primarily east-west highway traversing north-central San Diego and Imperial Counties. The Proposed Project would follow and cross SR78 along a 7-mile segment within the Anza-Borrego Link. The section of SR78 within the Anza-Borrego Link is a designated scenic highway by the State of California.

The Proposed Project would run adjacent to SR78 from MP 68.2 to the junction of San Diego County Highway S3 at MP 74.8 as an overhead transmission line. Between MP 68 through MP 70, the project would be a 500 kV overhead line with the existing 92 kV circuit underground within the SR78 ROW. From MP 70 through MP 74.8, the project would be a 500 kV overhead line with the existing 69 kV circuit underground within the SR78 ROW.

San Diego County Highway S3 (S3) is a paved north-south two-lane highway stretching from SR78 at Yaqui Pass Road north to Borrego Springs Road. The Proposed Project at MP 74.8 would cross over S3 near the junction with SR78. The 69 kV line would transition from underground to an overhead configuration and would be attached (underbuilt) onto the new 500 kV lattice steel towers overhead.

Old Kane Springs Road is an unclassified roadway in the County of Imperial Circulation Element. Old Kane Springs Road is an unpaved southeast-northwest two-lane road in the Borrego Valley stretching from the open desert lands east of Split Mountain Road to SR78. The unincorporated community of Ocotillo Wells is to the north of Old Kane Springs Road. The Proposed Project (MP 60.9 to MP 68.2) would follow adjacent to this road on lattice transmission towers to the intersection of SR78. The existing 92 kV circuit would be attached (underbuilt) on the new 500 kV lattice steel towers overhead.

Grapevine Canyon Road is an unpaved road in north central San Diego County extending from the intersection of SR78 and S3 through Grapevine Canyon. At the intersection of S3 and SR78 (MP 74.8) the existing 69 kV line would transition back to an overhead configuration and would be underbuilt onto the new 500 kV lattice steel towers. This segment would traverse through Grapevine Canyon to the western boundary of Anza-Borrego Desert State Park (ABDSP) (MP 83.5).

Table D.9-2. Public Roadways along the Proposed Route – Anza-Borrego Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
State Route 78	Caltrans	Highway	2	2005	2,100	68.2-74.8	Overhead
San Diego County Highway S3	San Diego County	Highway	2	ND	ND	74.8	Overhead
Local Roadways							
Old Kane Springs Road	Imperial County/ San Diego County	N/A	Unpaved	ND	ND	54.2-68.2	Overhead
Grapevine Canyon Road	San Diego County	N/A	Unpaved	ND	ND	74.8-83.5	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

D.9.2.3 Central Link

The potential roadways that would be affected by the Proposed Project in the Central Link are described below and presented in Table D.9-3. The regional transportation route in this area is SR76, 78 and 79 which are under the jurisdiction of Caltrans. All other roadways are under the jurisdiction of San Diego County. Figure B-5 is a map of the Central Link.

SR76 is a paved two-lane highway in north-central San Diego County providing access to Lake Henshaw. At MP 100, the Proposed Project would intersect SR76 as an overhead transmission line near the junction of SR79.

SR78 (Julian Highway) is a paved two- to four-lane, primarily east-west highway traversing north-central San Diego and Imperial Counties. The Proposed Project crosses over SR78 at MP 108.5 as an overhead transmission line.

Table D.9-3. Public Roadways along the Proposed Route – Central Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
State Route 76	Caltrans	Highway	2	2005	7,700	100.0	Overhead
State Route 78	Caltrans	Highway	2	2005	ND	108.5	Overhead
State Route 79 (SR78 to SR76)	Caltrans	Highway	2	2005	3,150	97.5-100.0	Overhead
San Felipe Road S2	San Diego County	Rural Collector	2	2006	12,760	90.0	Overhead
Montezuma Valley Road S22	San Diego County	Highway	2	2005	900	87.8 -90.0	Overhead

Table D.9-3. Public Roadways along the Proposed Route – Central Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
Local Roadways							
Mesa Grande Road	San Diego County	Rural Light Collector	2	2006	680	103.5-106.1	Overhead
Grapevine Canyon Road	San Diego County	N/A	Unpaved	ND	ND	83.5-87.6	Overhead

Source: California Department of Transportation; County of San Diego; Linscott, Law & Greenspan Engineers.
ND – Data not available; ADT = Average Daily Traffic

SR79 is a paved north-south two-lane highway traversing central San Diego County. The Proposed Project ROW is located east of SR79 between MP 97.5 and MP100, then crosses over SR79 at the intersection with SR76 (MP 100).

San Diego County Highway S2 (San Felipe Road) is a paved two-lane highway stretching from the San Diego–Imperial County line in a northwesterly direction to north-central San Diego County and terminating at SR79, south of Warner Springs. The Proposed Project crosses S2 south of S22 (MP 90) as an overhead transmission line.

San Diego County Highway S22 (Montezuma Valley Road) is a paved east-west two-lane highway that begins at S2 and runs east through the community of Borrego Springs, terminating at SR86. The Proposed Project would be located south of S22 from MP 87.8 to MP 90.

Mesa Grande Road is classified as a Rural Light Collector in the County of San Diego Circulation Element. Mesa Grande Road is a paved two-lane road that passes through the Mesa Grande Indian Reservation. The Proposed Project at MP 103.5 would cross over Mesa Grande Road as an overhead transmission line and would continue to follow Mesa Grande Road to MP 106.1 where the transmission line turns south.

Grapevine Canyon Road is an unpaved road in north central San Diego County extending from the intersection of SR78 and S3 through Grapevine Canyon. The 500 kV line would continue northwest through Grapevine Canyon to MP 87.6, following SDG&E’s existing 69 kV transmission line ROW. The existing 69 kV circuit would be removed from the wood poles and attached (underbuilt) to the 500 kV structures through this segment.

D.9.2.4 Inland Valley Link

The potential roadways that would be affected by the Proposed Project in the Inland Valley Link are described below and presented in Table D.9-4. The regional transportation route in this area is SR67, which is under the jurisdiction of Caltrans. All other roadways are under the jurisdiction of San Diego County. Figures B-6 and B-7 are maps of the Inland Valley Link.

R67 is generally a paved four-lane highway running north-south and serves as a prime arterial between the City of Santee, City of Poway, and the unincorporated community of Ramona. At MP 130.9, the Proposed Project would cross SR67 near the northeastern boundary of the Sycamore Canyon Preserve east of the City of San Diego.

Table D.9-4. Public Roadways along the Proposed Route – Inland Valley Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
State Route 67	Caltrans	Freeway	4	2005	21,800	130.9	Overhead
Local Roadways							
Gunn Stage Road	San Diego County	N/A	2-4	2006	4,790	117.2 – 119.8	Underground
San Vicente Road	San Diego County	Major Road	4	2006	16,500	119.8 – 121.9	Underground Overhead
Wildcat Canyon Road	San Diego County	Rural Collector	2	2006	28,450	121.5	Underground at intersection of San Vicente Road and Wildcat Canyon Road

Source: California Department of Transportation; County of San Diego; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ADT = Average Daily Traffic

Gunn Stage Road is an unclassified roadway in the County of San Diego Circulation Element. Gunn Stage Road is a paved two to four-lane divided roadway in the San Diego Country Estates development southeast of Ramona, stretching between San Vicente Road and terminating approximately one mile northeast of Watt Road at the boundary of the Mount Gower Open Space Preserve. Northeast of Watt Road, Gunn Stage Road is a two-lane divided roadway; and west of Watt Road, Gunn Stage Road is a four-lane divided roadway. Between MP 117.2 and MP 119.8, the Proposed Project would follow the southeast side of the roadway as an underground transmission line.

San Vicente Road is classified as a Major Road in the County of San Diego Circulation Element. San Vicente Road is a paved four-lane east-west road within the San Diego Country Estates development. Between MP 119.8 and MP 121.9, the Proposed Project would follow San Vicente Road from Gunn Stage Road to a point approximately 0.2 miles east of Wildcat Canyon Road as an underground transmission line.

Wildcat Canyon Road is classified as a Rural Light Collector between San Vicente Road and Painted Rock Road, and a Rural Collector south of Painted Rock Road. Wildcat Canyon Road is a paved two-lane road connecting the San Diego Country Estates development, Barona Reservation, and the unincorporated community of Lakeside. Wildcat Canyon Road begins in the unincorporated community of Lakeside and runs northerly through the Barona Reservation, terminating approximately one mile west of the San Diego Country Estates at San Vicente Road. At MP 121.5, the Proposed Project would cross the intersection of San Vicente and Wildcat Canyon Road.

D.9.2.5 Coastal Link

The potential roadways that would be affected by the Proposed Project in the Coastal Link are described below and presented in Table D.9-5. The regional transportation routes in this area are I-15 and SR56, which are under the jurisdiction of Caltrans. All of the other roadways are under jurisdiction of San Diego County or the City of San Diego. Figures B-8 and B-9 are maps of the Coastal Link.

Table D.9-5. Public Roadways along the Proposed Route – Coastal Link

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
Interstate 15 (North of Poway Rd)	Caltrans	Freeway	8-10	2005	223,000	141.0	Overhead
Interstate 15 (South of Poway Rd)	Caltrans	Freeway	8-10	2005	250,000	142.0	Overhead
State Route 56	Caltrans	Freeway	4	2005	62,000	142.3-143.9	Underground
Poway Road S4	San Diego County	Major Arterial	4-6	2005	49,130	141.0	Overhead
Local Roadways							
Pomerado Road	City of San Diego	Major Arterial	4	2006	21,120	138.0	Overhead
Scripps Poway Parkway	City of San Diego	Major/Prime Arterial	4-6	2005	42,670	140.0	Overhead
Rancho Peñasquitos Boulevard	City of San Diego	Major Arterial	4-6	2006	32,250	142.2	Underground
Park Village Road	City of San Diego	Major Arterial	4	ND	ND	144.2-145.0	Underground
Black Mountain Road	City of San Diego	Major Arterial	4-6	2006	21,930	144.0	Underground
Ocean Air Drive	City of San Diego	N/A	4	ND	ND	149.3	Overhead

Source: California Department of Transportation; County of San Diego; City of San Diego.
ND – Data not available; ADT = Average Daily Traffic

I-15 is an eight- to ten-lane freeway traversing the San Diego metropolitan region in a north-south direction with a posted speed limit of 65 mph. This freeway also includes two high-occupancy vehicle lanes in the median between SR163, at MCAS Miramar, and SR56. The Proposed Project at MP 141.5 would cross this freeway on the north side of the I-15/Rancho Peñasquitos Boulevard interchange as an overhead transmission line. Major construction activities associated with widening I-15 are ongoing to the north of the I-15/Rancho Peñasquitos Boulevard interchange.

SR56 (Ted Williams Parkway) is a paved four-lane divided east-west highway to the north of the Proposed Project route. SR56 is adjacent to the Proposed Project from the Rancho Peñasquitos Boulevard interchange to the Black Mountain Road interchange. SR56 and the Proposed Project do not intersect. The Proposed Project would be an underground transmission line in this area (MP 142.3 to MP 143.9).

San Diego County Highway S4 (Poway Road) is a paved east-west six-lane major roadway that begins at I-15 and runs east through the City of Poway, terminating at SR67. The Proposed Project would intersect Poway Road as an overhead transmission line adjacent to the east side of the I-15 interchange at MP 141.

Pomerado Road is classified as a Major Arterial in the City of San Diego Community Plan. Pomerado Road is generally a paved north-south two-lane road that passes through the far western portion of the City of Poway. The Proposed Project would cross Pomerado Road approximately 0.5 miles south of Scripps Poway Parkway as an overhead transmission line, at MP 138.

Scripps Poway Parkway is classified as a Major Arterial in the City of San Diego Community Plan. Scripps Poway Parkway is a paved east-west four-lane divided road that stretches eastward from I-15 and terminates at SR67. The Proposed Project would intersect Scripps Poway Parkway at the intersection of Cypress Canyon Road (MP 140) as an overhead transmission line. The Proposed Project would generally follow adjacent to the north side of the roadway from Cypress Canyon Road to a point approximately 0.5 miles east of I-15 then would turn to the northwest, within an existing transmission line corridor.

Rancho Peñasquitos Boulevard is classified as a Major Arterial in the City of San Diego Community Plan. Rancho Peñasquitos Boulevard is a paved northwest-southeast four-lane divided road that connects Rancho Peñasquitos to SR56 and I-15. Rancho Peñasquitos Boulevard becomes Carmel Mountain Road north of SR56 and becomes Poway Road east of I-15. The Proposed Project would parallel Rancho Peñasquitos Boulevard from I-15 to the Chicarita Substation as an overhead transmission line within an existing transmission corridor. The Proposed Project would intersect Rancho Peñasquitos Boulevard adjacent to the south side of the SR56 interchange as an underground transmission line (MP 142.2).

Park Village Road is classified as a Major Arterial in the City of San Diego Community Plan. Park Village Road is a paved east-west four-lane divided road stretching from Black Mountain Road west to the boundary of the Los Peñasquitos Canyon Preserve. At MP 144, the Proposed Project would be underground within Park Village Road for approximately one mile.

Black Mountain Road is classified as a Major Arterial in the City of San Diego Community Plan. Black Mountain Road is a paved north-south four-lane divided road connecting Mira Mesa Boulevard to Rancho Peñasquitos Boulevard. The Proposed Project would intersect Black Mountain Road (MP 144) adjacent to the south side of the SR56 interchange as an underground transmission line, where the proposed underground line would be within an existing SDG&E vacant ROW.

Ocean Air Drive is an unclassified roadway in the City of San Diego Community Plan. Ocean Air Drive is a paved north-south four-lane divided road adjacent to the east side of the Peñasquitos Substation in the Torrey Hills area of San Diego. The Proposed Project would intersect Ocean Air Drive (MP 149.3) approximately 0.1 miles south of El Camino Real as an overhead transmission line within an existing SDG&E ROW and then terminate at the Peñasquitos Substation.

D.9.2.6 Other System Upgrades

Reconductor Sycamore Canyon to Elliot 69 kV Line

The existing Sycamore Canyon Substation is located on the northeastern side of Miramar Marine Corps Air Station (MCAS Miramar). The Sycamore Canyon Substation would be reconducted so that the transmission line could follow the existing 69 kV Sycamore Canyon–Elliot Substation corridor. The transmission line would travel south-southwest from Sycamore Canyon Substation through MCAS Miramar and the City of San Diego for 8.2 miles to Elliot Substation. The following roadways are near the Reconductor Sycamore Canyon to Elliot 69 kV Line upgrade. The roadways are under jurisdiction of the City of San Diego. Table D.9-6 provides applicable roadway information for this upgrade. Figure B-11 illustrates the area of the reconductoring.

Table D.9-6. Public Roadways along the Proposed Route – Reconductor Sycamore Canyon to Elliot 69 kV Line

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
Local Roadways							
Tierra Santa Boulevard	City of San Diego	Major Arterial	4	2005	22,040	8.1	Overhead; Reconductor
Stonebridge Parkway	City of San Diego	ND	ND	ND	ND	—	Overhead; Reconductor
Pomerado Road	City of San Diego	Primary Street	2	ND	ND	—	Overhead; Reconductor

Table D.9-6. Public Roadways along the Proposed Route – Reconductor Sycamore Canyon to Elliot 69 kV Line

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
Spring Canyon Road	City of San Diego	Primary Street	4	ND	ND	—	Overhead; Reconductor
Scripps Poway Parkway	City of San Diego	Major/Prime Arterial	4-6	2005	42,670	—	Overhead; Reconductor

Source: California Department of Transportation; County of San Diego; City of San Diego.
ND = Data not available; ADT = Average Daily Traffic

Tierra Santa Boulevard is classified as a Major Arterial in the City of San Diego Community Plan. Tierra Santa Boulevard is a paved, east-west four-lane divided road to the south of the Proposed Project. The Proposed Project includes an upgrade of a 69 kV transmission line from the existing Sycamore Canyon Substation to the existing Elliot Substation. The 69 kV transmission line would intersect Tierra Santa Boulevard adjacent to the Elliot Substation as an overhead transmission line within SDG&E’s existing ROW.

Stonebridge Parkway is an unclassified street near the Sycamore Canyon Substation. The City/County of San Diego General Plans do not mention Stonebridge Parkway. Stonebridge Parkway is an east-west roadway starting east of Pomerado Road. Construction traffic would use Stonebridge Parkway to enter/exit access roads to Sycamore Canyon Substation.

Pomerado Road is currently built as a two-lane road east of the I-15 interchange. Construction traffic to the Sycamore Canyon Substation would use Pomerado Road via Stonebridge Parkway.

Spring Canyon Road is classified as a four-lane Collector Street in the Scripps Ranch Miramar General Plan. Currently, Spring Canyon Road is built as a four-lane roadway with bike lanes and a two-way left turn lane. Spring Canyon Road connects with Pomerado Road southwest Stonebridge Parkway.

Scripps Poway Parkway is classified as a Major Arterial in the City of San Diego Community Plan. Scripps Poway Parkway is a paved east-west four-lane divided road that stretches eastward from I-15 and terminates at SR67. Scripps Poway Parkway is north of Stonebridge Parkway and crosses Pomerado Road.

Modifications to San Luis Rey Substation

Proposed system upgrades at the existing San Luis Rey Substation would include installation of a third 230/69 kV transformer within substation property. Installation of the additional transformer would be required to mitigate a single element contingency (N-1) overload that would occur after energizing the SRPL transmission lines. The Proposed Project includes an upgrade of the existing San Luis Rey Substation located in the City of Oceanside. The roadways near the San Luis Rey Substation upgrades and the applicable roadway information are described below and presented in Table D.9-7. The roadways are under jurisdiction of the City of Oceanside. Figure B-10 illustrates the location of the substation.

Table D.9-7. Public Roadways along the Proposed Route – San Luis Rey Substation

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
Local Roadways							
El Camino Real	City of Oceanside	Major Arterial	4	2006	35,390	—	Adjacent to San Luis Rey Substation
Mesa Drive	City of Oceanside	Secondary Arterial	2	2005	12,430	—	Adjacent to San Luis Rey Substation

Source: City of Oceanside
ADT = Average Daily Traffic

El Camino Real is classified as a Major Arterial in the City of Oceanside Circulation Element. El Camino Real is a paved, north-south four-lane divided road to the north of the substation. The substation is adjacent to the west side of El Camino Real near the intersection of El Camino Real and Mesa Drive.

Mesa Drive is classified as a Secondary Arterial in the City of Oceanside Circulation Element. Mesa Drive is a paved, east-west two-lane road to the north of the substation. The San Luis Rey Substation is adjacent to the north side of Mesa Drive near the intersection of Mesa Drive and El Camino Real.

Modifications to South Bay Substation

The Proposed Project includes an upgrade of the existing South Bay Substation located in the City of Chula Vista. The roadways near the South Bay Substation upgrades and the applicable roadway information are described below and presented in Table D.9-8. The roadways are under jurisdiction of the City of Chula Vista and Caltrans. Figure B-10 illustrates the location of the substation.

Table D.9-8. Public Roadways along the Proposed Route – South Bay Substation

Roadway	Jurisdiction	Classification	Existing # of Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
Local Roadways							
Bay Boulevard	City of Chula Vista	Collector	2	2005	3,300	—	Adjacent to South Bay Substation
L Street	City of Chula Vista	Collector	4	2005	20,400	—	Adjacent to South Bay Substation
Industrial Boulevard	City of Chula Vista	Collector	2	2005	7,120	—	Adjacent to South Bay Substation
I-5 (Industrial Boulevard)	Caltrans	Freeway	8	2005	170,000	—	Adjacent to South Bay Substation

Source: City of Chula Vista
ADT = Average Daily Traffic

Bay Boulevard is classified as a Collector in the City of Chula Vista Circulation Element. Bay Boulevard is a paved, north-south two-lane road to the south of the South Bay Substation. The substation is adjacent to the west side of Bay Boulevard at the southeastern end of the San Diego Bay.

L Street is classified as a Class I Collector in the City of Chula Vista General Plan. Currently L Street is built as an east-west four-lane undivided road. L Street is adjacent to Bay Boulevard.

Industrial Boulevard is unclassified in the City of Chula Vista General Plan. Currently Industrial Boulevard is a north-south two-lane undivided roadway. Construction traffic may use Industrial Boulevard adjacent to L Street.

I-5 is an eight-lane, north-south freeway providing interregional access to all the cities from the southern San Diego County through northern California and into Oregon. Construction traffic may use the I-5 off/on-ramps at Bay Boulevard and Industrial Boulevard.

D.9.2.7 Transit and Rail Services

Following are the transit and rail services within the Proposed Project area that may be affected by the Proposed Project.

- The Atchison, Topeka & Santa Fe Railway is owned and operated by the Burlington Northern and Santa Fe Railway. This line does not cross the Proposed Project; however, it terminates at MCAS Miramar approximately 4 miles from the Proposed Project route. Project construction possibly could interrupt rail operations if construction activities required temporary closure of the railway.
- The San Diego and Arizona Eastern Railway (SD&AE) is owned by the San Diego Metropolitan Transit System (MTS), and operates the SD&AE railway within San Diego County. This line connects with the Santa Fe Railway. The Proposed Project would not cross the SD&AE Railway.
- The Union Pacific Railroad operates a railway east of Plaster City. The Proposed Project would intersect the railroad approximately three miles east of Plaster City as an overhead transmission line at MP 7, within the Imperial Valley Link causing temporary interruptions to rail operations.
- The United States Gypsum Corporation operates a narrow-gauge railroad from Plaster City to a mine located in the northern area of the Fish Creek Mountains. The Proposed Project would not cross this railway.
- The MTS provides transit service to the study area, servicing approximately 570 square miles. Based on the current transit services profiled throughout San Diego and Imperial Counties, 14 bus routes were determined to be potentially affected by the Proposed Project due to route delays or relocation of bus stops. Table D.9-9 details the affected bus routes.
- There are several school district bus routes within the Proposed Project area that could potentially be affected by the construction of the Proposed Project, including but not limited to Borrego Springs Unified School District, Ramona Unified School District, Poway Unified School District, Spencer Valley Elementary School District, Warner Unified School District, Julian Union Elementary School District, Julian Union High School District, and San Diego Unified School District. Potential bus route delays or temporary relocation of bus stops may be required during construction of the Proposed Project.

Table D.9-9. Bus Routes in the Study Area

Route	Description	Intersect or Overlap with the project
Imperial Valley Link		
Imperial Valley Transit 400	El Centro-Seeley	Proposed Project (MP 6) intersects the route on I-8 approximately 1.0 mile east of Dunaway Road interchange.
Imperial Valley Transit 450	Seeley-El Centro	Proposed Project (MP 6) intersects the route on I-8 approximately 1.0 mile east of Dunaway Road interchange.
Anza-Borrego Link		
MTS 891	Ramona-Borrego Springs	Proposed Project (MP 74.8) adjacent to the bus route on SR78 from S3 to San Felipe Road.
MTS 893	Ramona-Borrego Springs-Ocotillo Wells	Proposed Project (MP 74.8) adjacent to the bus route on SR78 from S3 to San Felipe Rd.
Central Link		
MTS 891	Ramona-Borrego Springs	Proposed Project (MP 109) intersects bus route just southwest of Santa Ysabel on SR78.
MTS 892	Ramona-Borrego Springs	Proposed Project (MP 100) intersects SR79 at the junction with SR76. Preferred Alignment (MP 109) intersects SR78 just southwest of Santa Ysabel.
Inland Valley Link		
MTS 867	(Route merged with 891/892 effective 1/30/06)	Proposed Project (MP 142) intersects the bus route adjacent to the SR56 / Rancho Peñasquitos Boulevard interchange.
MTS 891, 892, & 893	Ramona-points north & east	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
Coastal Link		
MTS 20	Downtown to North County	Proposed Project (MP 142) intersects the bus route adjacent to the SR56 / Rancho Peñasquitos Boulevard interchange.
MTS 810	Escondido to Downtown	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 820	Poway to Downtown	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 830	San Diego to Poway	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 844	Rancho Peñasquitos Boulevard	Proposed Project (MP 142) intersects the bus route adjacent to the SR56 / Rancho Peñasquitos Boulevard interchange and Poway Road adjacent to the I-15 / Rancho Peñasquitos Boulevard interchange.
MTS 860	Rancho Bernardo to Downtown	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 980	Rancho Bernardo to Downtown	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 990	Rancho Bernardo to Downtown	Proposed Project (MP 141) intersects the bus route adjacent to the I-15 / Poway Road interchange.
MTS 963/964	Mira Mesa Shuttle	The underground section of the Proposed Project intersects Ted Williams Boulevard and Black Mountain Road.

Source: Metropolitan Transit System; Imperial Valley Transit

D.9.2.8 Air Transportation

Within the study area, no major airports intersect or overlap with the project. However, there are two rural airstrips that are adjacent to the project, two small airports, and two military airports within three miles of the study area, which includes the Imperial Valley Link, Anza-Borrego Link, Central Link, Inland Valley Link, and Coastal Link of the Proposed Project. Private airstrips may also exist within the project study area. Aviation rules, regulations, permits, and other requirements pertaining to the Proposed Project are presented within this section. Within the Proposed Project study area, the majority of airspace is used for leisure, fire management, business, agriculture (crop dusting), tourism, traffic law enforcement, and national defense. Following are the airports in proximity to the Proposed Project.

- El Centro Naval Auxiliary Air Station is located approximately five miles north of I-8 in the Desert Link near MP 11.0 through MP 36.0. The U.S. Department of Defense uses this airport to access nearby military airspace and also for other purposes such as transport.
- Imperial County Airport is adjacent to the south side of the town of Imperial on the west side of SR86. The Proposed Project would be approximately five miles west of the Imperial County Airport in the Imperial Valley Link.
- A landing strip (unnamed) is located west of the Imperial County Airport at the junction of Imperial County Highways S28 and S30 at MP 20.4, oriented in an east-west direction. This landing strip is approximately two miles south of the Proposed Project along the Imperial Valley Link.
- Marine Corps Air Station Miramar (MCAS Miramar) airstrip is located in San Diego County west of Interstate 15 and north of SR52. The Proposed Project would be located within or adjacent to MCAS Miramar between MP 134.3 and 147.0 in the Coastal Link.
- Private airstrips may exist throughout the study area. Private airstrips include the use of personal aircraft for pleasure or perhaps for crop dusting. Crop dusting activities are more likely to occur along the Proposed Project in the Imperial Valley Link (see description in Section D.6, Agriculture). Other potential private aircraft activity could occur in the Grapevine Canyon area along the Proposed Project route as well as near the Santa Ysabel Reservation and near Ramona and the City of Poway.

D.9.2.9 Bicycle Facilities

There are bicycle lanes, bicycle routes, and bikeways on the roadways throughout the study area. Many will be affected by the Proposed Project.

Imperial Valley Link. Imperial Valley College Bike Path (IVCBP) is the only separated bike path in the Imperial Valley Link. The Imperial County Bicycle Master Plan indicates that additional monies will be spent to improve bicycle and pedestrian routes.

Anza-Borrego Link. Within Anza-Borrego Desert State Park, there are 110 miles of bike/hiking paths. There are four paths in particular that could be impacted by the Proposed Project. These paths are Narrows Earth Trail, Tamarisk Grove, Yaqui Well and Kenyon Trail.

Central Link. There are no designated bicycle paths within the Central Link section of the Proposed Project.

Inland Valley Link. There are designated bike paths within the Poway Community Park; however, these bike paths are unlikely to be impacted by the Proposed Project as the project is approximately 2 miles from the Poway Community Park. In addition, there are several two-part sidewalks within the Inland Valley Link that allow for bicycle use.

Coastal Link. Within the Coastal Link, there are several bicycle paths that could be impacted by the Proposed Project. Scripps Poway Parkway near I-15 is a designated bike route. The Proposed Project would run parallel or cross Scripps Poway Parkway. Additionally, the Proposed Project would cross Poway Road, a designated bike route. Los Peñasquitos Canyon has a designated bike path adjacent to the project at Black Mountain Road and Mercy Road, which would have the potential to be impacted by construction of the Proposed Project.

D.9.2.10 I-15 Managed Lanes Project

The I-15 Managed Lanes Project is a 20-mile will provide highway improvements between SR163 and SR78 in the Coastal Link. The project involves constructing four lanes with a moveable barrier for multiple access points to the highway lanes; direct access ramps for high-frequency Bus Rapid Transit (BRT) service; and BRT stations and direct access ramps. This project is being built in phases, with project completion expected in 2012. The first phase is between Centre City Parkway in Escondido and SR56, which is scheduled to open in 2007/2008. The Pomerado Bridge was demolished and completely rebuilt with four lanes; a pedestrian and bicycle path; a signalized intersection at the west end; upgraded seismic standards; and aesthetic improvements to coordinate with other construction in progress on I-15. The project will extend the Managed Lanes north from Centre City Parkway to SR78 by 2011. Following the second phase, the project will retrofit and redesign the existing eight-mile segment of Managed Lanes between SR56 and Kearny Mesa by 2012.

D.9.3 Applicable Regulations, Plans, and Standards

Construction of the Proposed Project could affect access, traffic flow patterns, parking, transit, and bicycle facilities on public streets and highways. Therefore, it is necessary for SDG&E and/or the construction contractor to obtain encroachment permits or similar legal agreements from the public agencies responsible for the affected roadways and other applicable ROWs. Such permits are needed for ROWs that would be crossed by the transmission line as well as where construction activities would require the use of ROWs and easements for parallel installations. For the Proposed Project, encroachment permits would be issued by Caltrans, the Counties of San Diego and Imperial, the Cities of San Diego and Poway, and other affected agencies and companies. The Proposed Project, including all helicopter construction activities, would also be required to comply with all appropriate regulations of the Federal Aviation Administration (FAA) and Restricted Military Areas.

Federal

Federal Aviation Administration. All airports and navigable airspace not administered by the Department of Defense are under the jurisdiction of the FAA. For any construction projects that would result in obstructions to navigable airspace, Federal Regulation Title 14 §77 establishes the standards and notification requirements set forth by the FAA. This regulatory process will require SDG&E to file for permit(s) to construct the Proposed Project near airports within Imperial and San Diego Counties. The FAA requires applicants to submit FAA form 7460-1, *Notice of Proposed Construction or Alteration* and receive approval prior to earth disturbance associated with the project. Title 14 Section 77.13 states that an aviation obstruction could be created if any equipment is positioned such that it would be more than 200 feet above the ground or if an object would penetrate the 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; FAA, 2006).] In addition, the FAA has restrictions on helicopter flights within 1,500 feet of residential dwellings. Helicopter flights within this area require a Helicopter Lift Plan.

State

Caltrans. The use of State highways for other than transportation purposes requires an encroachment permit, Caltrans form TR-0100. This permit is required for utilities, developers, and non-profit organizations for use of the State highway system to conduct activities other than transportation (e.g., landscape work, utility installation, film production) within the ROW. The application would be forwarded to Caltrans District 11, which is where the Proposed Project is located. The Caltrans Traffic Manual (Chapter 5) provides Traffic Controls for Construction and Maintenance Work Zones. Also, any project requirement to transport oversize or overweight loads would require approval from Caltrans.

California State Parks. The roadways located within the ABDSP are owned and maintained by multiple jurisdictions including Caltrans (SR78), County of San Diego (S2, S3, S22), and California State Parks (all non-state and non-county roads). Construction activities that are located within the existing easements of Caltrans and County of San Diego roadways may proceed without a permit from California State Parks. A Right-of-Entry permit is required for all construction and maintenance activities that are located outside of existing easements for all roadways regardless of jurisdiction. For existing and future access roads, an access right must be obtained from California State Parks in writing. All of the permits discussed will apply specifically to ABDSP to minimize impacts to the environment.

Local

San Diego County. San Diego County requires that the placement of any structures on, over, or under county roads requires an encroachment permit. Several roadways potentially affected by the Proposed Project are county-owned and maintained highways. The permit would be approved by the Department of Public Works as required by San Diego County Code of Regulatory Ordinances Section 71.

Imperial County. Imperial County would require the Proposed Project applicant to submit an encroachment permit application together with all required fees to the County of Imperial Public Works Director's Office. Approval and issuance of the permit must be obtained prior to all earth-disturbing activities.

City of Poway. The City of Poway requires that all State Department of Transportation rules and regulations are followed for vehicles and traffic. For any traffic control devices, only the Director of Public Services shall determine the hours and days during which any traffic control device shall be in operation or be in effect, except in those cases where such hours or days are specified in the Poway Municipal Code or established by resolution of the Council.

City of San Diego. The City of San Diego requires that a Public ROW Permit for Traffic Control be filed and approved prior to any construction projects not performed by the City of San Diego. This permit is equivalent to an encroachment permit issued by other jurisdictions. The permit is required when work will be performed within the public ROW, including the sidewalk area of the streetscape. Although the work would not be performed by the City of San Diego, the city would require the work to be subject to inspection by the city engineer, who reserves the right to change the traffic control plans as warranted.

Metropolitan Transit System. The MTS owns the SD&AE Railroad located east of San Diego in both San Diego and Imperial Counties. MTS requires that a Right-of-Entry permit be issued prior to construction within its ROW. Upon completion of construction, an Entitlement Permit must be issued to allow operation of the utility line. A permit for each individual crossing of the SD&AE railroad would be required.

Union Pacific Railroad Company. The Union Pacific Railroad operates railway lines east of Plaster City. Union Pacific requires that a Right-of-Entry permit be issued prior to construction within the ROW.

Environmental Impacts and Mitigation Measures for the Proposed Project

D.9.4 Significance Criteria and Approach to Impact Assessment

D.9.4.1 Significance Criteria

The significance criteria for transportation and traffic are based on the CEQA checklist in Appendix G of the CEQA Guidelines, a review of the environmental documentation for other utility projects in California, as well as on input from staff at the public agencies responsible for the transportation facilities. Transportation or traffic impacts would be significant if:

- The Proposed Project would require the temporary closure of a roadway, resulting in a temporary but substantial disruption to traffic flow and/or increased traffic congestion.
- Construction activities associated with the Proposed Project would restrict the movements of emergency vehicles (police cars, fire trucks, ambulances, and paramedic units) and there are no reasonable alternative access routes available.
- Increase in vehicle trips associated with construction worker commutes or equipment transportation associated with the Proposed Project would result in unstable flow, fluctuations in volumes of traffic which temporarily restrict flow or cause substantial drops in operating speeds that lead to an unacceptable reduction in level of service on any roadways along the project route, or as defined by each affected jurisdiction.
- Construction activities associated with the Proposed Project would substantially disrupt bus or rail transit service and there would be no suitable alternative routes or stops.
- Construction activities associated with the Proposed Project would result in a temporary but substantial disruption of rail traffic.
- Construction activities associated with the Proposed Project would impede pedestrian movements or bike trails and there are no suitable alternative pedestrian/bicycle access routes.
- Construction or staging activities associated with the Proposed Project would increase the demand for and/or reduce the supply of parking spaces and there would be no provisions for accommodating the resulting parking deficiencies.
- Construction activities associated with the Proposed Project would conflict with planned transportation projects in the project area.
- A noticeable increase in deterioration of roadway surfaces used for the Proposed Project's construction zone would occur as a result of heavy truck or construction equipment movements.
- A project structure, crane, or wires were to be positioned such that it could adversely affect aviation activities.

D.9.4.2 Applicant Proposed Measures

Table D.9-10 identifies SDG&E's Applicant Proposed Measures (APM) that would be followed during all project-related construction activity. As stated in EIR/EIS Section B6, SDG&E has committed to

implementing these measures in order to reduce the potential direct and indirect impacts that could result from the Proposed Project construction or operation.

Table D.9-10. Applicant Proposed Measures

APM No.	Description
TRANSPORTATION AND TRAFFIC	
T-APM-2a	Required permits for temporary lane closures will be obtained from the City of San Diego, City of Oceanside, City of Chula Vista, County of Imperial, County of San Diego, Caltrans, and California State Parks (if applicable).
T-APM-2b	Detour plans will be submitted to the counties, CALTRANS, and/or California State Parks as part of the permit requirements. Within the ABDSP, a Right-of-Entry (ROE) permit is required for any construction and maintenance activities that would occur outside of existing easements, including access roads (would not need ROE for access road maintenance if practical rights of ingress and egress are granted in easements). SDG&E will provide California State Parks a request in writing for maintenance or other earth-disturbing activities.
T-APM-4a	SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The counties and cities will then notify respective police, fire, ambulance and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing, and duration of any construction activities and advised of any access restrictions that could impact their effectiveness.
T-APM-5a	SDG&E will consult with the Imperial County Office of Education, Borrego Springs Unified School District, Warner Unified School District, Julian Union School District, and the Julian Union High School District at least one month prior to construction to coordinate construction activities adjacent to school bus stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. SDG&E will also consult with Imperial Valley Transit and the Metropolitan Transit System at least one month prior to construction to reduce potential interruption of transit services.
T-APM-6a	Parking is permissible on Imperial County-maintained roadways when vehicles are within eighteen inches of the curb; or if no curb is present, vehicles must not be more than eighteen inches away from the right-hand edge of the roadway's boundary. Vehicles must also be parallel to the roadway when parked, unless otherwise indicated. Parking is prohibited where signage indicates no parking. Parking shall comply within the County of Imperial ordinances whenever possible or as indicated in an approved traffic control plan.
T-APM-6b	Parking on San Diego County-maintained roads and highways is not permissible by law unless otherwise noted at specific locations. Parking is prohibited where signage and painted curbs indicates no parking. Where the Project crosses major roadways, parking shall be prohibited in the Project work area. Parking shall comply within the County of San Diego Department of Public Works Traffic Guidelines, 2001 whenever possible or as indicated in an approved traffic control plan.
T-APM-8a	Required permits for entering railroad right-of-way will be obtained from Union Pacific Railroad, San Diego & Arizona Eastern Railroad and the U.S. Gypsum Mine.
T-APM-9a	Eligible and Officially Designated Scenic Highways are located within Imperial and San Diego Counties. The California Public Utilities Code Section 320 requires that all new or relocated utility facilities within 1,000 feet of an Officially Designated Scenic Highway be undergrounded where feasible. SDG&E will bury all new or relocated utilities where feasible to avoid possible revocation of SR78 as an Officially Designated Scenic Highway within the ABDSP.
T-APM-10a	SDG&E or its construction contractor shall provide at all times the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to businesses and residences, and shall provide continuous access to properties when not actively constructing the underground cable alignment.

D.9.4.3 Impacts Identified

Table D.9-11 lists the impacts identified for the Proposed Project, along with the significance of each impact. Detailed discussions of each impact and the specific locations where each is identified are presented in the following sections. Impacts are classified as Class I (significant, cannot be mitigated to a level that is less than significant), Class II (significant, can be mitigated to a level that is less than significant), Class III (adverse, but less than significant), and Class IV (beneficial).

Table D.9-11. Impacts Identified – Proposed Project – Transportation and Traffic

Impact No.	Description	Impact Significance
Proposed Project		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II, III
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	No Impact, Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-8	Construction would conflict with planned transportation projects.	No Impact, Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	No Impact, Class III
Proposed Project – Future Transmission System Expansion		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II, III
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class II
T-3	Construction would temporarily disrupt bus transit services.	Class II, III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	No Impact, Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class II
T-8	Construction would conflict with planned transportation projects.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class II
Proposed Project – Connected Actions		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class II
T-3	Construction would temporarily disrupt bus transit services.	No Impact, Class II
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II, III
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	No Impact, Class II
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	No Impact, Class II

This section presents a discussion of impacts and mitigation measures for the Proposed Project. A transmission line project could substantially affect the ground transportation system (roads and railroads) during construction. The primary construction activities for overhead transmission that would affect the transportation system would be the installation of towers and the stringing of conductors, as these activities would interface with the public roadway system at numerous locations along the Proposed Project route. For underground segments in the Anza-Borrogo, Inland Valley and Coastal Links, the primary

construction activities affecting the transportation system would be trenching, storage, and transport of trench spoils; transport and storage of construction materials; and repaving of paved roadways.

Note that the text of each mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Table D.9-12. Imperial Valley, Anza-Borrego, Central Link, Inland Valley and Coastal Link Construction-Related Trip Generation

Type of Vehicle	Inbound Vehicles	Rate ^a	ADT	PCE ^b Value	ADT with PCE
Construction Trucks	75	2	150	2.0	300
Staff	400 ^c	2	800	1.0	800
Totals	475	NA	950	NA	1,100

a. Vehicles enter and exit, which equates to two (2) trips.
b. Highway Capacity Manual Passenger Car Equivalence (PCE) of 2.0.
c. Total of 800 maximum employees for project construction assuming 2 employees carpool per vehicle. This is because many construction locations would be remote, in some instances parking may be limited, and the fuel cost for operating a single-occupant vehicle can be reduced substantially with carpooling

In order to assess the project’s vehicular traffic-related impacts, trip generation rates were calculated. The project trip generation was calculated based on the estimated number of construction trucks and the number of employees to be utilized during the construction of each link and system upgrade. Since both the construction trucks and staff vehicles will enter and exit the site, a factor of 2.0 was applied to construction vehicles to estimate the car-equivalent effect on average daily traffic (ADT).

The Highway Capacity Manual (2000) summarizes Passenger Car Equivalence (PCE) factors for various types of vehicles. The PCE is defined as the number of passenger cars that are displaced by a single heavy vehicle of a particular type under the prevailing traffic conditions. Heavy vehicles have a greater traffic impact than passenger cars since:

- They are larger than passenger cars, and therefore, occupy more roadway space; and
- Their performance characteristics are generally inferior to passenger cars, leading to the formation of downstream gaps in the traffic stream (especially on upgrades), which cannot always be effectively filled by normal passing maneuvers.

A large amount of the project-generated traffic consists of heavy vehicles (trucks). Therefore, a PCE factor of 2.0 per truck was applied to the generated truck trips. Table D.9-12 shows that construction activities related to the Proposed Project for the Imperial Valley, Anza-Borrego, Inland Valley, Central, and Coastal Links would generate approximately 950 ADT. These numbers were used to evaluate whether construction would generate additional traffic impacts on the regional and local roadways.

D.9.5 Imperial Valley Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur within the Imperial Valley Link. Currently, there are no planned or foreseeable transportation projects within the Imperial Valley study area that would conflict with Proposed Project’s construction activities. In addition, underground construction is not planned in the Imperial Valley Link, and therefore,

no potential impacts would result from restricting access to properties and businesses from underground construction (Impact T-10).

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Construction of the Proposed Project could result in roadway closures at locations where the construction activities, especially transmission line stringing, would be located within ROWs of public streets and highways. The Imperial Valley Link would require transmission line stringing over I-8, SR86, and S80 at several locations, as well as stringing over various Imperial County roads. In addition, delivery of large equipment and materials via truck would also require temporary closures. Temporary closures of this nature would occur for only a few minutes at a time.

SDG&E has committed to T-APM-2a and T-APM-2b (see Table D.9-10) as part of the Proposed Project to reduce impacts associated with temporary road closures. T-APM-2a requires permits for temporary lane closures to be obtained from the applicable jurisdictions. T-APM-2b requires detour plans to be submitted to the counties, Caltrans, or other jurisdiction as part of the permit requirements.

In addition to T-APM-2a and T-APM-2b and prior to conducting work within or above a road ROW, an encroachment permit or similar authorization would be required from the applicable jurisdictional agency at locations where the construction activities would occur within or above the public road ROW. The specific requirements of the encroachment permit from the applicable transportation agencies will be determined on a project to project basis.

The encroachment permit issued by local jurisdictions may include the following:

- Identify all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.
- Develop circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.
- Schedule truck trips outside of peak morning and evening commute hours.
- Limit lane closures during peak hours to the extent possible.
- Use haul routes minimizing truck traffic on local roadways to the extent possible.
- Include detours for bicycles and pedestrians in all areas potentially affected by project construction.
- Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.
- Develop, and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, ask affected jurisdictions to identify detours, which will then be posted by the contractor.
- Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures.

- Store construction materials only in designated areas.
- Coordinate with local transit agencies for temporary relocation of routes or bus stops in works zones, as necessary.

Encroachment permit requirements would be specified by the agency having jurisdiction. Enforcement of the terms of an encroachment permit would reduce impacts associated with short-term road closures. Compliance with the APMs described above also would avoid or reduce some impacts, but overall impacts would remain significant (Class II). Implementing Mitigation Measure T-1a restricting the time of day when lane closures would occur will ensure that impacts are less than significant.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures. SDG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in congested areas to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., unless otherwise directed in writing by the responsible public agency issuing an encroachment permit.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activities could interfere with emergency response by ambulance, fire, paramedic, and police vehicles. Potential roadway segments that would be most impacted would be two-lane roadways, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion could lengthen the response time for emergency vehicles to pass through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone.

SDG&E has committed to T-APM-4a as part of the Proposed Project to reduce the impact of a temporary disruption of the operation of emergency service providers. T-APM-4a requires SDG&E to coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. Impacts associated with temporary disruption of the operation of emergency service providers would be considered less than significant (Class III) because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures and would identify alternative routes as necessary to maintain emergency service coverage and response times. No mitigation measures are required.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Overhead transmission line stringing could affect transit operation within the project vicinity, during both overhead and underground transmission line installation. Construction of the Proposed Project has the potential to cause schedule delays and bus stop closures and/or temporary bus stop relocations.

SDG&E has committed to implementing Applicant Proposed Measure T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected school districts and transit systems at least one month prior to construction to coordinate construction activities adjacent to school bus stops and to reduce potential interruption of transit services. Implementation of T-APM-5a would result in less than significant impacts (Class III) because school districts and transit systems will be able to develop alternative routes and/or bus stops avoiding the construction zone. Additionally, the Proposed Project would require

an encroachment permit which would require the construction contractor to establish methods for minimizing construction effects on transit service in the CTMP. Additional mitigation measures are not required.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bike routes were blocked. While there are few locations along the Imperial Valley Link alignment where pedestrian or bicycle uses would occur, it is possible that such uses would be encountered on local roadways. This would be a significant impact. Implementation of Mitigation Measure T-4a would ensure that SDG&E would maintain safe pedestrian and bicycle access, and with this measure, impacts would be less than significant (Class II).

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a **Ensure pedestrian and bicycle circulation and safety.** Where construction will result in temporary closures of sidewalks and other pedestrian facilities, SDG&E shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

There is potential for unexpected damage to roads by vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area.

SDG&E has not suggested any applicant proposed measures for damaged roads. Therefore, this would be a significant impact. However, Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Implementation of Mitigation Measure T-5a will reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels (Class II) by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a **Repair damaged roads.** If damage to roads occurs as a result of project construction or construction vehicle traffic, SDG&E shall restore damaged roadways at their own expense under the direction of the affected public agencies to ensure that any impacts are adequately repaired. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction. Prior to construction, SDG&E will determine with the governing agency the appropriate method for documenting pre- and post-construction conditions.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Overhead construction activities could interfere with rail traffic because construction of overhead transmission lines could require temporary use or closure of a railroad ROW. It would be necessary to halt through-rail traffic during stringing operations over railroads. In addition, delivery of large equipment and materials via truck would also require temporary closures. Temporary closures, although likely to occur only for up to a few minutes at a time, could cause back ups with freight trains and constrain circulation in the area.

The Proposed Project would cross Union Pacific Railroad ROW at MP 7. SDG&E has committed to T-APM-8a as part of the Proposed Project; requiring permits to enter railroad ROWs. Union Pacific Railroad requires, as one of the permit conditions, that crossings will not be installed under or within 500 feet from the end of any railroad bridge, or 300 feet from the centerline of any culvert or switch area. By complying with all of the individual railroad companies' permit requirements, the impacts of the Proposed Project on rail traffic and operations would be less than significant (Class III) because the railroad ROW permit would include conditions that would satisfy the railroad's operational needs. No additional mitigation measures are required.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities would result in the short-term elimination of a limited amount of parking spaces immediately adjacent to the construction ROW. Staging areas could also be used for temporary parking. Construction could impact Payne Road, Edgar Road, Wheeler Road, Imler Road, and Huff Road and several local roads in the Imperial Valley agricultural area. In areas with no major roadways, no parking impacts would occur.

SDG&E has committed to implementation of T-APM-6a as part of the Proposed Project, requiring SDG&E to comply with the County of Imperial ordinances whenever possible or as indicated in an approved traffic control plan which will address impacts of eliminating parking spaces.

Implementation of T-APM-6a would limit the impacts of eliminating parking spaces because SDG&E would prepare a traffic control plan that would have specific methods for minimizing construction effects on parking, such as using staging areas for parking, and would be approved by the appropriate jurisdiction(s). Due to the temporary period of construction and the limited amount of eliminated parking spaces, as well as the required conformance with ordinances and traffic control plans impacts to parking spaces would be less than significant (Class III). However, to further ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a **Notify public of potential short-term elimination of parking spaces.** As required in Mitigation Measures L-1a, prior to any construction activity on major roadways, SDG&E shall notify the public of the potential for parking spaces to be temporarily eliminated and where temporary parking spaces will be relocated through multiple media such as local newspapers and on-site postings. The elimination and relocation of parking spaces must be in conformance with the requirements of agencies responsible for parking management.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Within the Imperial Valley Link, the construction of the Proposed Project would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils.

At any single location, this impact would be short-term as crews move over the approximately 60-mile Imperial Valley Link. As shown in Table D.9-13, most roadways affected by the Proposed Project in the Imperial Valley Link would operate at Level of Service (LOS) A, which is defined as “free flowing” with the addition of the project traffic. Because it is estimated that no more than 125 workers would be employed along the entire Link at any one time, the Proposed Project is not expected to generate a significant increase in daily trips on the regional roadways. Worker-generated traffic would occur primarily in the early morning and late afternoon, while general deliveries likely would occur throughout the day.

Additional traffic generated by the Proposed Project on local and regional roadways within the Imperial Valley Link and could decrease the local and regional roadway Level of Service in the vicinity. In those instances, impacts to regional and local roadways would be significant (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan. SDG&E shall prepare a Construction Transportation Management Plan (CTMP) to address traffic and transportation issues related to project construction. The CTMP shall describe alternate traffic routes, timing of worker commutes and material deliveries, the need for lane and road closures, the use of helicopters, plans for construction worker parking and transportation to work sites, methods for keeping roadways clean, and other methods for reducing adverse construction-related traffic impacts on regional and local roadways. The plan must comply with the requirements of the respective county and must be submitted to the respective counties and Caltrans for approval prior to commencing construction activities.

Table D.9-13. Roadway Level of Service Operations – Imperial Valley Link

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Evan Hewes Hwy S80 (near Plaster City)	Imperial County	16,200	920	A	0.06	1,496	A	0.09	0.03
I8 at MP6	Imperial County	80,000 ^e	18,900	A	0.23	19,476	A	0.24	0.01
Imler Road	Imperial County	16,200	600	A	0.04	1,176	A	0.07	0.03
Huff Road	Imperial County	16,200	1,160	A	0.07	1,736	A	0.11	0.04
SR78	Imperial County	37,000	1400	A	0.037	1976	A	0.053	0.016

Table D.9-13. Roadway Level of Service Operations – Imperial Valley Link

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
SR86	Imperial County	37,000	11,400	A	0.308	11,976	A	0.323	0.015

- a. Average daily traffic.
- b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)
- c. Volume to capacity ratio.
- d. Δ denotes an increase in delay due to project.
- e. General Planning Level Capacity of 4-lane Freeway

Modifications to Imperial Valley Substation

The existing Imperial Valley Substation (MP 0) would be modified to accommodate the termination of an additional 500 kV circuit. Currently, the 500 kV Southwest Power Link (SWPL) transmission line passes through the Imperial Valley Substation as it brings power from Arizona to San Diego and Imperial Valley, and connects to the IID transmission system.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

All proposed modifications and associated staging and access requirements would be located within the previously disturbed area of SDG&E substation property. The new structures and equipment would be comparable to the existing equipment. Modifications would include the installation of seven line and bus dead-end structures, five 500 kV circuit breakers, seven 500 kV disconnect switches, communication interfaces and primary and back-up metering equipment, as required. No additional lighting would be required.

Access to the substation would be from Drew Road. Substation modifications and operational activities related to the Imperial Valley Substation would temporarily increase traffic and potentially require upgrading of access roads to the substation. SDG&E has committed to implementing T-APM-2a, T-APM-2b, T-APM-4a, T-APM-5a, and T-APM-6a as part of the Proposed Project. APMs commit SDG&E to obtain encroachment permits, developing circulation and detour plans, limit lane closures during peak hours, and develop and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools among other project specific measures.

Construction of the substation would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils.

Additional traffic generated by the Proposed Project on local and regional roadways within the Imperial Valley Link and could decrease the local and regional roadway Level of Service in the vicinity. In those instances, impacts to regional and local roadways would be significant (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan. SDG&E shall prepare a Construction Transportation Management Plan (CTMP) to address traffic and transportation issues related to project construction. The CTMP shall describe alternate traffic routes, timing of worker commutes and material deliveries, the need for lane and road closures, the use of helicopters, plans for construction worker parking and transportation to work sites, methods for keeping roadways clean, and other methods for reducing adverse construction-related traffic impacts on regional and local roadways. The plan must comply with the requirements of the respective county and must be submitted to the respective counties and Caltrans for approval prior to commencing construction activities.

Operational Impacts

Project operations would have a less than significant impact on traffic, circulation, and/or the level of service on Project roadways. Project operations would not cause emergency access restrictions, affect parking capacity, or increase roadway hazards. Additionally, air traffic patterns would not be affected by the placement of new structures or power lines because there are no known airports or landing strips within 5 miles of the Imperial Valley Substation. The project would not directly or indirectly have the potential to conflict with adopted policies, plans or programs supporting alternative transportation.

Operation of the substation would not impact transportation or circulation because the substation would remain an unmanned facility. Maintenance activities would occur occasionally; however, SDG&E's vehicles would make brief stops along a roadway shoulder or within the roadway ROW to complete needed maintenance activities. The project would not increase the number of trips on roadways; however, for major maintenance and repair work that require lane restrictions and/or roadway closures, SDG&E would implement T-APM-2a through T-APM-8a which would require SDG&E to obtain permits that would include a CTMP. The CTMP would describe circulation and detour routes, limit lane closures, etc. Therefore, potential impacts on transportation resources would be less than significant (Class III) and no mitigation is required.

D.9.6 Anza-Borrego Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Anza-Borrego Link because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur within the Anza-Borrego Link. Currently, there are no known transportation projects within the Anza-Borrego study area that would conflict with the Proposed Project's construction activities. San Felipe Creek Bridge improvements were completed in April 2007.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Anza-Borrego Link would require transmission line stringing over Scenic Highway SR78 and stringing over various San Diego County roads. Additionally, IID 92 kV and SDG&E 69 kV transmission lines would be constructed underground at various sections throughout the Anza-Borrego Link, causing lane closures along Scenic Highway SR78. Specifically, the existing 92 kV transmission line would be constructed underground within SR78 ROW between MP 68.2 and MP 69.7, which is the boundary of the existing Narrows Substation. The existing 69 kV transmission line would be placed underground within SR78 ROW between MP 69.7 and MP 74.8, near the intersection of SR78 and S3.

Underground construction along SR78 may close the roadway, or at a minimum limit the roadway to a single lane. Construction of the underground segment is expected to take approximately 30 to 40 days to complete. Residents, State Park officials, and members of the public would experience traffic delays along SR78 and S3 during underground construction.

In addition to underground construction, it would be necessary to halt through traffic during overhead stringing operations above public access roads and Caltrans facilities. Delivery of large equipment and materials via truck may also require temporary lane or roadway closures. Such closures could increase traffic levels and constrain circulation in the area depending on the time of day, even if for only a few minutes at a time.

SDG&E has committed to T-APM-2a and T-APM-2b as part of the Proposed Project, which would limit potential impacts to less than significant because permits would be acquired and detour plans would allow motorists to avoid or move through the construction zone as efficiently as possible. However, due to the severity of traffic impacts that would occur during construction of underground segments within SR78, the APMs would not be adequate to ensure that significant impacts would not occur.

Implementation of Mitigation Measure T-1a is required to ensure that significant impacts (Class II) associated with temporary road and lane closures would be reduced to less than significant levels. Mitigation Measure T-1a would restrict all necessary lane closures on major roadways associated with overhead or underground construction activities to off-peak periods. Restricting lane and road closures would ensure that traffic delays are not experienced during peak hours as well as requiring SDG&E to coordinate with appropriate jurisdiction to determine when the least amount of traffic may experience lane/road closures in order to minimize impacts on transportation.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activities could interfere with emergency response by ambulance, fire, paramedic, and police vehicles. However, to comply with T-APM-4a commitment, SDG&E would coordinate in advance with all emergency service providers in order to develop alternative routes and adjust service areas and destinations as necessary to maintain emergency service coverage and response times. Therefore, potential impacts to operation of emergency service providers would be less than significant (Class III) and no mitigation would be required.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Overhead transmission line stringing could affect bus operations on Routes 891 and 893 as well as local school bus routes along SR78. SDG&E has committed to implement T-APM-5a as part of the Proposed Project, which would require SDG&E to consult with all school districts that could have bus routes impacted by construction activities in order to develop alternative routes and/or relocate bus stops during construction. Impacts related to disruptions to bus transit services would be less than significant (Class III) and no mitigation measures would be required because bus and transit services would have adequate time to develop temporary alternative routes and/or relocate bus stops during the construction of the Anza-Borrego Link.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

In ABDSP, pedestrian and bicycle circulation could be affected by transmission line construction activities at Narrows Earth Trail, Tamarisk Grove, Yaqui Wells, Kenyon Trail, and other trails, resulting in an impact to users if there were unable to pass through the construction zone (Class II). Potential impacts to pedestrian and bicycle circulation would be less than significant with the implementation of Mitigation Measures T-4a and WR-1b because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage for trail users for pedestrian and bicycles with in ABDSP.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a **Ensure pedestrian and bicycle circulation and safety.**

WR-1b **Provide temporary detours for trail users.** No less than 60 days prior to construction, SDG&E shall coordinate with the authorized officer of the trails listed below to establish temporary detours of the trails to avoid construction area hazards, if required. SDG&E shall post a public notice of the temporary trail closure and information on the trail detour. SDG&E shall document its coordination efforts with the authorized officer and submit this documentation to the CPUC, BLM, and affected park jurisdictions at least 30 days prior to construction.

- Juan Bautista de Anza National Historic Trail
- ABDSP Trails
- Trans-County Trail
- Pacific Crest National Scenic Trail
- San Dieguito River Park Trails
- Mission Trails Regional Park (Fortuna, Rim, and Quarry Loop Trails)

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Approximately 6.6 miles of underground construction would occur within the SR78 ROW. There is also the potential for damage to occur to roads by vehicles and equipment (line trucks, crew trucks, and concrete trucks) that would be entering and leaving roads within the project area. SDG&E has not suggested any applicant proposed measures for damaged roads. Therefore, this would be a significant impact. However, implementation of Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as con-

struction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels (Class II) by requiring physical roadway improvements to areas that are noticeably damaged. Refer to Section D.3 for a discussion of the visual impacts associated with utility facilities near Officially Designated Scenic Highways.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

With the exception of organized camping areas, there are no designated parking spaces in the Anza-Borrego Link. However, construction activities would result in short-term elimination of parking immediately adjacent to the construction ROW. Construction could impact SR78, S3 and local roadways used by bicyclists. Implementation of T-APM-6b would limit the potential impacts to less than significant because construction parking would comply with the County of San Diego Department of Public Works Traffic Guidelines and approved traffic control plan (Class III) which may require temporary replacement of parking if loss of parking would create a hardship as determined by the affected public agencies. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended, but not required because the impact is less than significant without mitigation, in order to notify the public of the potential that construction could eliminate parking spaces and where temporary spaces will be relocated.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Proposed Project would generate temporary additional traffic on regional and local roadways, mainly Old Kane Springs Road, SR78, and Grapevine Canyon Road. Construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils would temporarily increase traffic volumes in the Anza-Borrego Link; however, the increase in traffic volumes is not expected to decrease the LOS on roadways within the Proposed Project route. At any single location, this impact would be short-term, as the crews move over the entire 22-mile Anza-Borrego Link. It is assumed that construction crew members would carpool to and from the construction site, reducing the impact of generating additional traffic. Table D.9-14 shows the traffic volumes and Level of Service categories for that would occur during construction of the Proposed Project.

Table D.9-14. Roadway Level of Service Operations – Anza-Borrego Link

Roadway	Jurisdiction	LOS E Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Old Kane Springs Road	San Diego County/Imperial County	ND	ND	ND	ND	ND	ND	ND	ND
Borrego Springs Road from Yaqui Pass Rd to SR78	San Diego County	16,200	600	A	0.04	1,176	A	0.07	0.03
Split Mountain Road	San Diego County	16,200	800	A	0.05	1,376	A	0.08	0.03
Grapevine Canyon Road	San Diego County	ND	ND	ND	ND	ND	ND	ND	ND

a. Average daily traffic.

b. Level of service; a measure of roadway congestion, ranging from A (free flowing) to F (highly congested). The acceptable LOS standard for roadways and intersections in San Diego County is LOS D

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

e. ND = Data are not collect by the counties on lightly used local roads, but are collected on larger arterial and connector roads

Because it is estimated that no more than 125 workers would be employed along the entire Link at any one time, the Proposed Project is not expected to generate a significant increase in daily trips on the regional roadways. Additionally, any movement of large equipment would occur during off-peak hours reducing the impact of additional trips on roadways within the Proposed Project area. Because impacts related to construction traffic would be temporary and would not significantly decrease the LOS on roadways in the construction zone, the Proposed Project would not cause an increase in traffic volumes that would be substantial in relation to the existing traffic load. As shown in Table D.9-14, the roadways affected by the Proposed Project in the Anza-Borrego Link are expected to operate at LOS A. However, additional traffic generated by the Proposed Project on local and regional roadways within the Anza-Borrego Link and could decrease the local and regional roadway Level of Service in the vicinity. In those instances, impacts to regional and local roadways would be significant (Class III). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

SDG&E plans to underground the existing 69 kV and 92 kV circuits within the SR78 ROW. Underground construction on any portion of this road could restrict access to properties and other neighboring roadways. In addition, trenching operation may disrupt State Park officials from accessing portion of ABDSP. SDG&E has committed to implementing T-APM-10, which would require that construction crews quickly lay a temporary steel plate trench bridge upon request in order to ensure property and roadway access to residents and State Park officials. With the implementation of T-APM-10, impacts would be less than significant and no mitigation measures would be required.

Operational Impacts

The impacts associated with operation of the Proposed Project in the Anza Borrego Link would be similar to the issues described for the Imperial Valley Link. SDG&E would need to inspect and maintain the proposed lines throughout the year. Aerial inspection of the Proposed Project would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. Overall, project operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III). As there are no known airports or landing strips within approximately six miles of the Proposed Project no impacts to aviation are expected.

D.9.7 Central Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Central Link because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur within the Central Link. Currently, there are no known transportation or foreseeable projects within the Central Link study area that would conflict with Proposed Project's construction activities. In addition, underground construction is not planned in the Central Link, and therefore, no potential impacts would result from restricting access to properties and businesses from underground construction (Impact T-10).

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class III)

The Central Link lane closures may occur on SR78, SR79, SR76, S2, and Mesa Grande Road due to stringing operations as well as delivery of large equipment and materials via truck. Temporary closures would occur for only up to a few minutes at a time. However, compliance with T-APM-2a and T-APM-2b would require SDG&E to obtain encroachment permits. Encroachment permit requirements would be specified by the agency having jurisdiction. Enforcement of the terms of an encroachment permit would reduce impacts associated with short-term road closures. Compliance with the APMs described above also would avoid or reduce some impacts, but overall impacts would remain significant (Class II). Implementing Mitigation Measure T-1a restricting the time of day when lane closures would occur will ensure that impacts are less than significant.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activities could interfere with emergency response by ambulance, fire, paramedic, and police vehicles. Potential roadway segments that would be most impacted would be two-lane roadways, which provide one lane of travel per direction, or where access is temporarily blocked by the construction zone.

SDG&E has committed to implement T-APM-4a as part of the Proposed Project. Implementation of T-APM-4a would ensure that operation of emergency service providers is not affected by making emergency service providers aware of any potential delays, lane closures, and/or roadway closures and maintain their effectiveness. By notifying emergency service providers of the construction location and activities prior to construction, alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times. Impacts would be less than significant (Class III), and no mitigation measures are required.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Overhead and underground transmission line installation could affect bus operations within the Central Link. Potential impacts include schedule delays and bus stop closures and/or temporary bus stop relocations. MTS operates two bus routes between Ramona and Borrego Springs (MTS 891 and 892). In addition, school bus routes could be affected by construction activities.

SDG&E has committed to implementing T-APM-5a as part of the Proposed Project which would require SDG&E to notify the affected bus and transit services at least one month prior to construction activities in order to coordinate routes and/or relocation of bus stops. Implementation of T-APM-5a would ensure that bus and transit services are not impacted because alternate routes and stops would be developed. Therefore, impacts would be less than significant (Class III) and no mitigation is required.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

There are no designated bicycle lanes, bicycle routes and bikeways in the Central Link. However, bicyclists and pedestrians potentially may use the local roadways for travel in the Santa Ysabel area. Therefore, pedestrian and bicycle circulation would be significantly affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone (Class II). Impacts to pedestrian and bicycle circulation would be less than significant with the implementation of Mitigation Measures T-4a (Class II) and Mitigation Measure WR-1b because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage as well as temporary detours for trail users for pedestrian and bicycles within the Central Link.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

- T-4a Ensure pedestrian and bicycle circulation and safety.**
- WR-1b Provide temporary detours for trail users.**

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

There is potential for damage to roads by vehicles and equipment (line trucks, crew trucks, and concrete trucks) from construction of substation and overhead transmission lines by line trucks, crew trucks, and concrete trucks that would be entering and leaving roads within the project area. SDG&E has not suggested any applicant proposed measures for damaged roads. Therefore, this would be a significant impact. However, implementation of Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less significant levels (Class II) by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities could result in short-term elimination of a limited amount of parking immediately adjacent to the construction ROW. Construction could impact SR76, SR78, SR79, S2, and Mesa Grande Road. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project. Implementation of T-APM-6b would limit the potential impacts to less than significant because construction parking would comply with the County of San Diego Department of Public Works Traffic Guidelines and approved traffic control plan (Class III) which would require temporary replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Proposed Project would generate temporary additional traffic on the regional and local roadways. Construction worker commute trips, project equipment deliveries and hauling materials such as support structures and poles, concrete, fill, and excavation spoils would increase traffic volumes in the Central Link study area; however, the additional traffic is not expected to decrease the current LOS. At any single location, this impact would be short-term, as crews would move over the entire 27-mile Central Link over two years. As shown in Table D.9-15, the roadways affected by the Proposed Project in the Central Link would operate at LOS A with the addition of the project traffic, which is considered free flowing traffic. However, additional traffic generated by the Proposed Project on

local and regional roadways within the Central Link and could decrease the local and regional roadway Level of Service in the vicinity. In those instances, impacts to regional and local roadways would be significant (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Table D.9-15. Roadway Level of Service Operations – Central Link

Roadway	Jurisdiction	LOS E Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Montezuma Valley Road S22	San Diego County	16,200	900	A	0.05	1,476	A	0.09	0.04
San Diego County Highway 2	San Diego County	ND	ND	ND	ND	ND	ND	ND	ND
State Route 79	Caltrans	ND	ND	ND	ND	ND	ND	ND	ND
State Route 76	Caltrans	ND	ND	ND	ND	ND	ND	ND	ND
Mesa Grande Road	San Diego County	16,200	680	A	0.04	1,156	A	0.07	0.03
State Route 78	San Diego County	ND	ND	ND	ND	ND	ND	ND	ND

a. Average daily traffic.

b. Level of service.

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

e. ND = Data are not collect by the counties on lightly used local roads, but are collected on larger arterial and connector roads

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Proposed Central East Substation

The proposed Central East Substation would provide a voltage step down from the 500 kV transmission line from the Imperial Valley Substation to the double-circuit 230 kV line exiting toward the existing Sycamore Canyon Substation. The Central East Substation would be constructed on a parcel owned by SDG&E near the community of San Felipe, west of S2 and approximately 1.5 miles south of the intersection of S2 and S22. SDG&E assumes that construction of the substation would take approximately 8 months to complete all necessary construction activities including excavation, grading, and below and above grade installations, among other activities on the 66-acre site.

Access to the substation would be from San Felipe (S2). Substation modifications and operational activities related to the Central East Substation would temporarily increase traffic and would require constructing new access roads to the substation. SDG&E has committed to implementing T-APM-2a, T-APM-2b, T-APM-4a, T-APM-5a, and T-APM-6a as part of the Proposed Project, which would help limit the potential traffic impacts near the Proposed Central East Substation by coordinating with local authorities prior to construction in order to avoid potential traffic impacts. As described above, there are no rail or bus services near the proposed substation (Impacts T-6 and T-3). There are no known

planned transportation projects that would conflict with the construction of the substation (Impact T-8). Construction equipment could cause temporary road and lane closures that could disrupt traffic flow on S2 (Impact T-1) or disrupt operation of emergency service providers (Impact T-2). Construction activities could disrupt pedestrian movement and safety on local roads (Impact T-4), could restrict access to properties (Impact T-10), damage local roads (Impact T-5), and could reduce parking in the area (Impact T-7). If construction requires an encroachment permit, the permit requirements would be specified by the agency having jurisdiction. Enforcement of the terms of an encroachment permit would reduce impacts associated with short-term road closures. Based on its location, impacts from construction of the substation would be less than significant (Class III). However, traffic mitigation measures identified below are recommended to further ensure impacts are minimized.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Operational Impacts

The potential impacts associated with operation of the Proposed Project in the Central Link would be similar to the issues described for the Imperial Valley Link. SDG&E would need to inspect and maintain the proposed lines and substation throughout the year. Aerial inspection of the Proposed Project would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. It is assumed that one or two light duty trucks would travel to the substation on a weekly basis. Overall, project operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III) because the regional and local roadway LOS would not decrease due to operation of the Central East Substation, traffic delays are not expected to significantly impact regional and local roadway LOS, and roadways are not expected to noticeably incur significant physical damage among other impacts.

D.9.8 Inland Valley Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Inland Valley Link because there are no rail operations in the area.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Inland Valley Link would require stringing operations over public access roads and Caltrans facilities. Within the Inland Valley Link, SR67, Gunn Stage Road, San Vicente Road, Wildcat Canyon Road, and adjacent neighborhood streets may be closed due to construction, although not simultaneously. The Proposed Project would be underground in Gunn Stage Road and San Vicente Road between MP 118 and MP 122.

Implementation of T-APM-2a and T-APM-2b would reduce impacts because permits would be acquired and detour plans submitted which would include alternative routes where motorists could not move through the construction zone efficiently. However, San Vicente Road is currently operating at a LOS F level (at the capacity of the roadway), mitigation measures have been developed to ensure that significant impacts associated with temporary road and lane closures would not further disrupt traffic flow. Therefore, with implementation of Mitigation Measure T-1a impacts would be reduced to less than significant levels (Class II) because the roadway LOS would not be decreased and alternative routes would be planned where necessary. Mitigation Measure T-1a would restrict all necessary lane closures on roadways to off-peak periods reducing the impacts of temporary road and lane closures.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead and underground construction activities could interfere with emergency response by ambulance, fire, paramedic, and police vehicles. SDG&E has committed to implement T-APM-4a as part of the Proposed Project which would require SDG&E to notify emergency service providers of the construction location and activities prior to construction so that alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times. Therefore, no mitigation measures would be required.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Bus transit service could be affected during both overhead and underground transmission line installation. Within the Inland Valley Link, MTS routes 867, 891, 892, and 893 (see Table D.9-9) could notice schedule delays and bus stop closures and/or temporary bus stop relocations. Additionally, school bus routes could be affected by construction activities.

SDG&E has committed to implementing T-APM-5a as part of the Proposed Project. T-APM-5 requires that SDG&E provide at least one month advanced coordination with affected services to limit delays and allow for schedule and bus stop adjustments to be made (Class III). By prior notification, the transit and bus service providers will have sufficient amount of time to designate alternative bus stops and plan

alternative routes, avoiding the construction zone. Therefore, no mitigation measures would be required because impact would be eliminated by the alternative routes and stops.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

There are several two-part sidewalks that allow for bicycle use within the Inland Valley Link. Pedestrian and bicycle circulation could be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bike routes were blocked. In order to avoid significant impacts to pedestrians and bicycle movements alternative pedestrian and bicycle routes would need to be established around the construction zone for safe passage as well as temporary detours for trail users for pedestrian and bicycles within the Central Link. Implementation of Mitigation Measure T-4a and WR-1b would reduce these impacts to less than significant (Class II) because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage as well as temporary detours for trail users for pedestrian and bicycles within the Inland Valley Link.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

WR-1b Provide temporary detours for trail users.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

The Proposed Project would be located underground along Gunn Stage Road and San Vicente Road. It would also cross the intersection underground at San Vicente Road and Wildcat Canyon Road, a very busy intersection. As described in Section D.9.2.4, these roads range between two and four lanes. Construction of overhead and underground transmission lines may damage roads by vehicles and equipment entering and leaving roads within the project area. SDG&E has not suggested any applicant proposed measures for damaged roads. Therefore, this would be a significant impact. However, implementation of Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment could have on roads to less than significant levels (Class II) by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities would result in short-term elimination of a limited amount of parking spaces immediately adjacent to the construction ROW. Construction impacts may impact the town of Ramona and adjacent neighborhood streets as well SR67. SDG&E has committed to implementing T-APM-6b and will comply with San Diego County ordinances concerning parking which would require temporary

replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies or similar measures. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-8: Construction would conflict with planned transportation projects (Class III)

In the Inland Link, the proposed transmission line would cross the ROW of numerous roadways/transportation corridors, including San Vicente Road, along the project alignment. The construction activities could potentially impact the widening and pathways projects along the San Vicente Road. The public agencies that have jurisdiction over San Vicente Road would be notified of the project through the Notice of Preparation/Notice of Intent, and an encroachment permit or other such agreement which must be obtained for each location where the project would interface with a roadway or other transportation facility. Complying with local permits and agreements would ensure appropriate coordination between SDG&E and the affected agencies so that conflicts would be avoided or minimized. The impacts would be less than significant (Class III), and no mitigation measures would be required because coordination with appropriate agencies would require plans and schedules to be submitted for approval prior to construction reducing any potential impacts.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Proposed Project would generate temporary additional traffic on the regional and local roadways. As shown in Table D.9-16, most roadways affected by the Proposed Project in the Inland Valley Link would operate at LOS D or worse with the addition of the project traffic. Wildcat Canyon Road and San Vicente Road are calculated to continue to operate at LOS F operations with the addition of Project traffic; whereas, Gunn Stage Road would decrease to a LOS of D (approaching unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions).

Table D.9-16. Roadway Level of Service Operations – Inland Valley Link

Roadway	Jurisdiction	LOS E Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Wildcat Canyon Road	S.D. County	16,200	28,450	F	1.76	29,026	F	1.79	0.03
Gunn Stage Road	S.D. County	16,200	4,790	C	0.30	5,366	D	0.33	0.03
San Vicente Road	S.D. County	16,200	16,500	F	1.02	17,076	F	1.05	0.03

a. Average daily traffic.

b. Level of service.

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

Bold and shading indicates a potential significant impact.

Temporary construction impacts may occur along Gunn Stage Road, San Vicente Road and at the intersection of San Vicente Road and Wildcat Canyon Road. However, Mitigation Measure T-9a would ensure that significant impacts to levels of service on area roadways would be reduced to a less than significant impact by preparing a CTMP which would require SDG&E to coordinate with the affected city and/or county to plan alternative routes and determine acceptable on- and off-peak hours for construction activities, among other measures needed to keep the LOS on affected roadways from dropping below acceptable levels of service. (Class II).

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

The underground double-circuit 230 kV transmission line would follow a trail in the San Diego County Preserve, and would be installed within Gunn Stage Road and San Vicente Road. Underground construction on any of these roads could restrict access to properties, business, and other neighboring streets. At any site requiring underground construction, SDG&E would quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to businesses and residences (T-APM-10). SDG&E's commitment to implement T-APM-10 as part of the Proposed Project would prevent occurrence of significant impacts. No mitigation measures would be required.

Operational Impacts

The potential impacts associated with operation of the Proposed Project in the Inland Valley Link would be similar to the issues described for the Imperial Valley Link. SDG&E would need to inspect and maintain the proposed lines throughout the year. Aerial inspection of the Proposed Project would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. Overall, project operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III) there would not significantly increase traffic on regional or local roadways nor would operation and maintenance significantly add to disruption of traffic flow.

D.9.9 Coastal Link Impacts and Mitigation Measures

Environmental Impacts and Mitigation Measures

Construction Impacts

Impact T-6 (Construction activities would cause a temporary disruption to rail traffic or operations) would not occur because the Proposed Project does not cross or run adjacent to any railways.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Construction of the underground and overhead transmission line in the Coastal Link could cause temporary road and lane closures that would temporarily disrupt traffic flow. Lane closures may occur on I-15, Pomerado Road, Scripps Poway Parkway, Poway Road, Rancho Peñasquitos Boulevard, Black Mountain Road, Park Village Road, Ocean Air Drive, and SR56 at Rancho Peñasquitos Boulevard and Black Mountain Road. Although road closures would occur for only up to a few minutes at a time, closures of this nature could increase traffic levels and constrain circulation in the area depending on the time of day.

SDG&E is committed to T-APM-2a and T-APM-2b that would require SDG&E to acquire permits and develop detour plans prior to construction. The detour plans would include alternative routes to move traffic through the construction zone efficiently. However, due to the current LOS on roadways within the Coastal Link, (which range between LOS B through F), implementation of Mitigation Measure T-1a would ensure that significant impacts associated with temporary road and lane closures that would temporarily disrupt traffic flow are reduced to less than significant levels (Class II) by requiring SDG&E to plan lane closures during off peak hours and preparing detour routes to reduce traffic delays and prevent the LOS on the Coastal Link roadways from deteriorating further.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead and underground construction activities could interfere with emergency response by ambulance, fire, paramedic, and police vehicles. SDG&E has committed to implementing T-APM-4a which would require SDG&E to notify emergency service providers of the construction location and activities prior to construction so that alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times. Therefore, no mitigation measures required.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Overhead transmission line stringing could affect bus operations within the project vicinity. Bus routes that would be affected include MTS 20, MTS 810, MTS 820, MTS 830, MTS 844, MTS 860, MTS 980, MTS 990, MTS 963, and MTS 964 (See Table D.9-9).

Implementation of T-APM-5a would temporarily relocate or reroute bus stops if needed until construction in the vicinity is complete. Additionally, T-APM-5a, would require SDG&E to consult with the affected school districts and transit systems at least one month prior to construction to coordinate construction activities adjacent to school bus stops and to reduce interruption of transit services. Impacts to bus transit services would be less than significant (Class III) because alternative routes and bus stops would be planned avoiding impacts from construction of the Proposed Project. Therefore, additional mitigation measures are not required.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by underground and overhead transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bike routes were blocked. Within the Coastal Link there are several designated bicycle paths including, Scripps Poway Parkway, Poway Road, and Los Peñasquitos Canyon, as well as several city streets in the City of San Diego. In order to avoid significant impacts to pedestrians and bicycle movements alternative pedestrian and bicycle routes would need to be established around the construction zone for safe passage as well as temporary detours for trail users for pedestrian and bicycles within the Central Link. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant (Class II) because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

The Proposed Project would be located underground in Park Village Road for approximately 4,000 feet. Park Village Road is a Major Arterial roadway in the City of San Diego. The Proposed Project also crosses Rancho Peñasquitos Boulevard (MP 142) and Black Mountain Road (MP 144) underground. There is potential for damage to roads by vehicles and equipment to occur from construction of underground and overhead construction of transmission lines by line trucks, crew trucks, concrete trucks, etc. that would be entering and leaving roads within the project area. SDG&E has not suggested any applicant proposed measures for damaged roads. Therefore, this would be a significant impact. However, implementation of Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment could have on roads to less than significant levels (Class II) by requiring physical roadway improvements to areas that are noticeably damaged, primarily to underground sections of the Proposed Project.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities would result in short-term elimination of parking spaces immediately adjacent to the construction zone. Construction could impact Pomerado Road, Peñasquitos Boulevard, Black Mountain Road, Park Village Road, Ocean Air Drive, and adjacent neighborhood streets. SDG&E has committed to implementing T-APM-6b and will comply with San Diego County ordinances concerning parking which would require temporary replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies or similar measures. Therefore, any

elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation. Please see the explanation of mitigation for less than significant impacts in Section D.1.5.1.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-8: Construction would conflict with planned transportation projects (Class III)

In the Coastal Link, the proposed transmission line would cross the ROW of numerous roadways/transportation corridors, including I-15, along the project alignment. The construction activities could potentially conflict with improvement projects along one or more of these facilities such as the I-15 Managed Lanes construction project that is adding additional freeway lanes to increase highway capacity. The Proposed Project could interfere with the I-15 Managed Lanes project by constructing the overhead transmission line at or near the construction location of the I-15 Managed Lanes Project. Caltrans and the County of San Diego have been notified of the project through the Notice of Preparation/Notice of Intent process. An encroachment permit or other such agreements that require detour routes, a CTMP, and other pertinent information must be obtained for each location where the project would interface with a roadway or other transportation facility. Complying with local permits and agreements would ensure appropriate coordination between SDG&E and the affected agencies so that conflicts would be relocated and avoided or minimized. The impacts would be less than significant (Class III), and no mitigation measures would be required because appropriate detour plans and/or relocation routes would be developed.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Proposed Project would generate temporary additional traffic on the regional and local roadways. Construction worker commute trips, project equipment deliveries and hauling materials such as support structures and poles, concrete, fill, and excavation spoils would increase traffic volumes in the Coastal Link study area. At any single location, this impact would be short-term, as crews would move over the entire 13-mile ROW over two years. As shown in Table D.9-17, most roadways affected by the Proposed Project in the Coastal Link would operate at LOS D or better with the addition of the project traffic.

Table D.9-17. Roadway Level of Service Operations – Coastal Link

Roadway	Jurisdiction	LOS E Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Poway Road (S4)	City of Poway	37,000	49,130	F	1.33	49,706	F	1.34	0.01
Black Mountain Road north of Carmel Mountain Road	City of S.D.	40,000	21,930	C	0.68	22,298	C	0.69	0.01
Black Mountain Road south of Carmel Mountain Road	City of S.D.	40,000	27,360	C	0.55	27,728	C	0.56	0.01
Scripps Poway Parkway	City of S.D.	45,000	42,670	E	0.95	43,038	E	0.96	0.01
Pomerado Road	City of S.D.	45,000	21,120	B	0.47	21,488	B	0.48	0.01
Rancho Peñasquitos Boulevard	City of S.D.	40,000	32,250	D	0.81	32,618	D	0.82	0.01
Park Village Road	City of S.D.	40,000	18,690	B	0.47	19,058	B	0.48	0.01
State Route 56	Caltrans	80,000	62,000	D	0.77	62,368	D	0.78	0.01
I-15	Caltrans	150,000 ^e	223,000	F	1.49	223,368	F	1.49	0.00

a. Average daily traffic.

b. Level of service.

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

e. General Planning Level Capacity of 8-lane Freeway

Poway Road and I-15 currently operate at LOS F. With the addition of project traffic the LOS is not expected to decrease. However, any additional traffic would be a significant impact (Class II). Implementation of Mitigation Measure T-9a would ensure that significant impacts to levels of service on area roadways would be reduced to a less than significant impact by preparing a CTMP which would require SDG&E to coordinate with the affected city and/or county to plan alternative routes and determine acceptable off-peak hours for construction activities, among other measures to keep the LOS on affected roadways from decreasing further.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

The potential impacts associated with operation of the Proposed Project in the Coastal Link would be similar to the issues described for the Imperial Valley Link. SDG&E would need to inspect and maintain the proposed lines and substation throughout the year. Aerial inspection of the Proposed Project would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. It is assumed that one or two light duty trucks would travel to the substation on a weekly basis. The Coastal Link of the Proposed Project would be located within the MCAS Miramar height restriction regulations; however, the Proposed Project will not include structures or towers which penetrate the 200 feet or 100:1 slope extending 20,00 feet from the nearest point of the nearest runway; therefore, no impacts to air traffic are expected. Overall, project operations would have a less than significant impact on traffic,

circulation, and/or the level of service on nearby roadways (Class III) because operation and maintenance is not expected to decrease the LOS on roadways, create traffic delays or impact traffic flow.

Modifications to Sycamore Canyon Substation

The Sycamore Canyon Substation (MP 136.3) is located northeasterly of Miramar Marine Corps Air Station and would be modified to accommodate termination of three new 230 kV transmission circuits: two Central East lines and one Peñasquitos line. All proposed modifications and associated staging and access requirements would be located within the previously disturbed area of SDG&E substation property.

Modifications required to accommodate the termination of the three new 230 kV transmission circuits would include installation of two line dead-end structures, four 230 kV circuit breakers, eight 230 kV disconnect switches, other bus support structures, required protection relay panels, and communication interface equipment. All modifications would be similar to the respective structures already in place at the substation. It is not expected that new access roads would be required for modifications at the Sycamore Canyon Substations.

Modifications to Sycamore Canyon Substation would not affect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with modifications to Sycamore Canyon Substation (Impact T-8). SDG&E has committed to implement the APMs listed in Table D.9.10. With implementation of APMs the modifications to Sycamore Canyon Substation would cause less than significant impacts to road closures (Impact T-1), emergency service providers (Impact T-2), disrupt bus transit (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), eliminate parking spaces (Impact T-7), and restrict access to properties (Class III). APMs commit SDG&E to obtain encroachment permits that involve developing a CTMP that will include circulation and detour plans, limit lane closures during peak hours, and develop, and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools among other project specific measures. Impacts to transportation resources would be less than significant (Class III) because the LOS on roadways will not be significantly decreased and traffic flow is not expected to be unstable on local and regional roadways. Therefore, no further mitigation is required.

Modifications to Peñasquitos Substation

The existing Peñasquitos Substation (MP149.9) is located northeast of the junction of Interstate Highways 5 and 805 (I-5 and I-805). Under the Proposed Project, Peñasquitos Substation would be modified to accommodate the termination of one new 230 kV transmission circuit from the Sycamore Canyon Substation. All work and associated staging areas and equipment would be located on previously disturbed areas within the boundaries of the existing SDG&E substation property.

Modifications at the Peñasquitos Substation would include installation of two 230 kV circuit breakers, four 230 kV disconnect switches, bus support structures, required protection relay panels, and communication interface equipment. The new structures and equipment would be similar to the respective structures already in place at the substation. No new access roads are proposed.

Construction-related to the Peñasquitos Substation modifications may generate temporary additional traffic on the local roadways. Construction worker commute trips, project equipment deliveries and hauling materials such as substation equipment, concrete, fill, and excavation spoils would increase traffic volumes in the project study area.

Modifications to Peñasquitos Substation would not affect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with modifications to Peñasquitos Substation (Impact T-8).

SDG&E has committed to implement the APMs listed in Table D.9.10. Modifications to Peñasquitos Substation would cause less than significant impacts to road closures (Impact T-1), emergency service providers (Impact T-2), disrupt bus transit (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), eliminate parking spaces (Impact T-7), and restrict access to properties (Class III). APMs commit SDG&E to obtain encroachment permits that involve developing a CTMP that will include circulation and detour plans, limit lane closures during peak hours, and develop, and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools among other project specific measures. Impacts to transportation resources would be less than significant (Class III) because the LOS on roadways will not be significantly decreased and traffic flow is not expected to be unstable on local and regional roadways. Therefore, no further mitigation is required.

D.9.10 Other System Upgrades – Impacts and Mitigation Measures

Reconductoring of Sycamore – Elliott Line

SDG&E plans to reconductor the 69 kV transmission line between Sycamore Canyon and Elliott Substations. Work would include improving the existing access roads, replacing the conductors and insulators, and replacing some of the existing wood pole structures. These upgrades would occur near the following roads: Tierra Santa Boulevard; Stonebridge Parkway; Pomerado Road; Spring Canyon Road; and Scripps Poway Parkway. All of these roads are either two- or four-lane roads that are classified as primary street or major arterials.

Reconductoring Sycamore Canyon and Elliott Substation would not affect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with reconductoring the 69 kV line (Impact T-8).

SDG&E has committed to implement the APMs listed in Table D.9.10. Reconductoring of an existing 69 kV line would cause less than significant impacts to road closures (Impact T-1), emergency service providers (Impact T-2), disrupt bus transit (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), eliminate parking spaces (Impact T-7), and restrict access to properties (Class III). Appropriate coordination with local jurisdictions, as required by the APMs, would ensure that CTMPs and other measures included in pre-construction planning prevent reduction in LOS on roadways as well as reduce traffic delays. Therefore, no mitigation is required.

Modifications to San Luis Rey Substation

System upgrades at the existing San Luis Rey Substation would include installation of a third 230/69 kV transformer and a 230 kV capacitor with associated surge arrestors and current limiting reactors within substation property. Other equipment would include two 230 kV gas circuit breakers, two 69 kV breakers, four 69 kV disconnect switches, two dead-end structures, and required protection relay panels and communication interfaces. Installation of the additional transformer would be required to mitigate a single element contingency overload that would occur after energizing the proposed transmission lines.

All construction activities and associated equipment would be within the existing substation fence on previously disturbed areas. The new structures and equipment would be similar to the respective structures and equipment already in place at the substation.

Modifications to San Luis Rey Substation would not effect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with modifications to San Luis Substation (Impact T-8).

SDG&E has committed to implement the APMs listed in Table D.9.10. Modifications to San Luis Substation would cause less than significant impacts to road closures (Impact T-1), emergency service providers (Impact T-2), disrupt bus transit (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), eliminate parking spaces (Impact T-7), and restrict access to properties (Class III). Appropriate coordination with local jurisdictions, as required by the APMs, would ensure that CTMPs and other measures included in pre-construction planning to prevent reduction in LOS on roadways as well as reduce traffic delays. Therefore, no mitigation is required.

Modifications to South Bay Substation

Modification of the existing South Bay Substation would include a 69 kV 50MVAR shunt capacitor to provide system voltage support to the Proposed Project in the event of a power outage. Other associated equipment to be installed would include one 69 kV standard profile switch rack, one 69 kV circuit breaker, one 69 kV capacitor bank with associated reactors and surge arrestors, two disconnect switches, and the required protection relay panels.

All construction-related activities and equipment would be contained within the existing substation property on previously disturbed areas. The new structures and equipment would be similar to the respective structures and equipment already in place at the substation.

Modifications to South Bay Substation would not effect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with modifications to South Bay Substation (Impact T-8).

SDG&E has committed to implement the APMs listed in Table D.9.10. Modifications to South Bay Substation would cause less than significant impacts to road closures (Impact T-1), emergency service providers (Impact T-2), disrupt bus transit (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), eliminate parking spaces (Impact T-7), and restrict access to properties (Class III). Appropriate coordination with local jurisdictions, as required by the APMs, would ensure that CTMPs and other measures included in pre-construction planning prevent reduction in LOS on roadways as well as reduce traffic delays. Therefore, no mitigation is required.

D.9.11 Future Transmission System Expansion

The Proposed Project would facilitate the possible future construction of additional 230 kV and 500 kV transmission lines. These lines are not proposed at this time, but because the construction of the Proposed Project would include a substation and create new transmission corridors that could be used by these additional circuits, impact analysis is presented in this EIR/EIS.

The 230 kV expansion facilities are addressed in Sections D.9.11.1 and D.9.11.2; the 500 kV expansion facilities are addressed in Sections D.9.11.3 and D.9.11.4.

D.9.11.1 Environmental Setting – 230 kV Future Transmission System Expansion

As described in Section B.2.7, the Central East Substation that would be built as a part of the Proposed Project would accommodate up to six 230 kV circuits. Only two circuits are proposed by SDG&E at this time, but construction of additional 230 kV circuits out of the Central East Substation may be required within the next 10 years. This section considers the impacts of construction and operation of these potential future transmission lines. Based on information provided by SDG&E, there are four substation endpoints and five routes that would be most likely for these future lines; each is addressed below. Figure B-12a illustrates the potential routes of each of the 230 kV transmission lines.

Central East Substation to Sycamore Canyon or Peñasquitos Substation

The new 230 kV line would most likely follow the proposed SRPL project route from the Central East Substation to Sycamore Canyon Substation or Peñasquitos Substation. Therefore, the environmental setting for the new 230 kV line would be the same as for the proposed SRPL project, which is described in D.9.2.3 (Central Link), Section D.9.2.4 (Inland Valley Link), and Section D.9.2.5 (Coastal Link).

Central East Substation to Mission Substation

The new 230 kV line would most likely follow the proposed SRPL project route from the Central East Substation to the Sycamore Canyon Substation. Therefore, the environmental setting for the future 230 kV line would be the same as for the proposed SRPL project. At the Sycamore Canyon Substation, the 230 kV line would turn southwest and would most likely follow an existing 69 kV transmission line corridor that runs between Sycamore Canyon and Elliot Substations. Approximately 6.0 miles of the Grazing Land are associated with the existing 69 kV transmission line corridor between the Sycamore Canyon and Elliot Substations. Installation of a future 230 kV line between the Sycamore Canyon and Elliot Substations would occur entirely on undeveloped land under the jurisdiction of the Department of Defense (i.e., MCAS Miramar). From Elliot Substation, the route would continue southwest for an additional 4.0 miles within the existing 69 kV corridor, through Mission Trails Regional Park, and crossing I-15 to terminate at the existing Mission Substation, located at 9060 Friars Road, which is 0.9 miles north of I-8 and 0.25 miles west of I-805.

The roadway near the Sycamore Canyon to Elliot 69 kV Line and the applicable roadway information are described below and presented in Table D.9-6. The roadway is under jurisdiction of the City of San Diego.

Tierra Santa Boulevard is classified as a Major Arterial in the City of San Diego Community Plan. Tierra Santa Boulevard is a paved, east-west four-lane divided road to the south of the Proposed Project. The Proposed Project includes an upgrade of a 69 kV transmission line from the existing Sycamore Canyon Substation to the existing Elliot Substation. The 69 kV transmission line would intersect Tierra Santa Boulevard adjacent to the Elliot Substation as an overhead transmission line within SDG&E's existing ROW.

The roadways near the route from the Elliot Substation to the Mission Substation and the applicable information are described below.

I-15 is an eight- to ten-lane freeway traversing the San Diego metropolitan region in a north-south direction with a posted speed limit of 65 mph. This freeway also includes two high-occupancy vehicle lanes in

the median between SR163 and SR56. The new 230 kV line crosses I-15 before it terminates at the existing Mission Substation.

I-8 is the main east-west freeway in San Diego County. The new 230 kV line would terminate at the Mission Substation, which is 0.9 miles north of I-8.

I-805 is classified as a major north-south freeway in western San Diego County.

Central East Substation to Los Coches Substation

The future 230 kV line would most likely follow the proposed SRPL project route from the Central East Substation to 1.0 mile south of the Creelman Substation (MP 122.2) in the Town of Ramona. Therefore, the environmental setting for the future 230 kV transmission line would be similar to the proposed SRPL project from these locations. At MP 122.2, the future expansion 230 kV line could turn south following the existing Creelman-Lakeside 69 kV corridor through unincorporated San Diego County and then 1.6 miles through largely hilly open space on the Barona Reservation east of the San Vicente Reservoir and west of the Barona Creek Golf Club, the Barona Valley Resort and Casino, and Oak Oasis Open Space Preserve. The route would then pass through or adjacent to Louis A. Stelzer County Park, cross the San Diego River and terminate at the existing Los Coches Substation 0.3 miles northwest of Lake Jennings near Lake Jennings County Park and the community of Lakeside.

Another possible 230 kV route segment leading to the Los Coches Substation would follow the existing overhead 69 kV line north of San Diego Country Estates, past the Creelman Substation and south across San Vicente Road.

A separate environmental impact assessment will be completed for the future 230 kV line from the proposed Central East Substation to Los Coches Substation at which time impacts to traffic and transportation will be assessed. The following information may be modified.

San Vicente Road is classified as a Major Road in the County of San Diego Circulation Element. San Vicente Road is a paved north-south two- to four-lane road in the unincorporated community of Ramona, and it is an east-west road in the San Diego Country Estates development.

Wildcat Canyon Road is classified as a Rural Light Collector between San Vicente Road and Painted Rock Road and a Rural Collector south of Painted Rock Road in the County of San Diego Circulation Element. Wildcat Canyon Road is a paved two-lane road connecting the San Diego Country Estates development, Barona Reservation, and the unincorporated community of Lakeside. Wildcat Canyon Road begins in the unincorporated community of Lakeside and runs northerly through the Barona Reservation and terminates approximately one mile west of the San Diego Country Estates at San Vicente Road.

Barona Road is a paved two-lane highway stretching from the San Vicente Road to Lake Jennings Park Road in the San Diego County.

Willow Road is a paved two-lane roadway stretching from the SR67 to Lake Jennings Park Road to east of Wildcat Canyon Road in the San Diego County.

El Monte Road/Julian Avenue is a paved two-lane roadway from Channel Road to Lake Jennings Park Road. El Monte Road is a paved two-lane roadway east of Lake Jennings Park Road.

Lake Jennings Park Road is a paved four-lane roadway from Pino Drive to El Monte Road and a three-lane paved road from El Monte Road Jack Oak Road.

Central East Substation to Escondido Substation

Northern Route to Escondido Substation. From the proposed Central East Substation, the future 230 kV transmission line route would travel west through Vista Irrigation District land paralleling the proposed SRPL route for approximately 6.6 miles to its intersection with SR79. At SR79 the line would diverge from the proposed SRPL route and would head north parallel to SR79 for approximately 1.2 miles to the intersection of Highway S2 with SR79 at the existing Warner Substation. From there the route would parallel the existing 69 kV corridor west across open space owned by Vista Irrigation District north of Lake Henshaw and then it would turn southwest, following the northwest edge of the lake to SR76.

At SR76 the route would turn west-northwest paralleling SR76 for 13.3 miles following the existing Warners-Rincon 69 kV transmission corridor across and/or bordering parcels of the Cleveland National Forest for approximately 4 miles and across La Jolla Reservation for 6 miles, crossing Cedar Creek, Plaisted Creek and Potrero Creek, and then into Rincon Substation, which is just north of the Rincon Reservation at the County Highway S6 intersection with SR76. The hilly route along SR76 is primarily agricultural/open space with scattered rural residences.

At Rincon Substation the route would diverge from SR76 and would follow the existing Rincon-Escondido 69 kV corridor, generally parallel to County Highway S6 south, crossing Potrero Creek, San Luis Rey River and a tributary to Paradise Creek, through the Rincon Reservation for 3 miles passing through some medium density single family residential and commercial land uses. South of the Rincon Reservation, the route would turn west in the Valley Center Substation area generally paralleling S6, passing on the west side of Hellhole Canyon County Open Space Preserve (approximately 0.30 miles from the ROW), and then would turn south on the east side of S6 for 1.6 miles before turning southwest, crossing S6, and entering the City of Escondido after approximately 0.75 miles. The new line could run adjacent to or cross Daley Ranch near Escondido. In the City of Escondido, the route would turn south and then southwest for approximately 8 miles following the existing 69 kV corridor into Escondido Substation.

A separate environmental impact assessment will be completed for the future 230 kV line from the proposed Central East Substation to Escondido Substation at which time impacts to traffic and transportation will be assessed. The following information may be modified.

SR76 is a paved two-lane highway in north-central San Diego County providing access to Lake Henshaw.

SR79 is a paved north-south two-lane highway traversing central San Diego County.

Grand Avenue is a four-lane paved roadway from North Centre City Parkway to Valley Blvd in the City of Escondido. It is classified as a Collector in the City of Escondido Circulation Element.

S6 is a two-lane northeast-west paved highway which runs through Escondido to Valley Center.

Valley Center Road is classified as a Prime Arterial north of El Norte Parkway in the City of Escondido. It extends from SR76 to Lake Wohlford Road. It is currently built as a paved four-lane undivided roadway with a two way left turn lane north of Lake Wohlford Road. The posted speed limit ranges from 45 to 55 mph with bus stops provided intermittently. Bike lanes are not provided and curbside parking is prohibited.

Centre City Parkway is classified as a Major Road on the City of Escondido Circulation Element. Currently, Centre City Parkway is constructed as a four-lane divided roadway, providing two lanes of travel per

direction. No shoulders are provided and curbside parking is prohibited. Bike lanes are provided along both sides of the road.

I-15 is an eight- to ten-lane freeway traversing the San Diego metropolitan region in a north-south direction with a posted speed limit of 65 mph. This freeway also includes two high-occupancy vehicle lanes in the median between SR163 and SR56. Major construction activities associated with widening I-15, are ongoing to the north of the I-15/Peñasquitos Boulevard interchange.

Ash Street is classified as a Collector Street from El Norte Parkway to Lincoln Avenue and as a Major Street from Lincoln Avenue to Oak Hill Drive. Ash Street is built as a paved two-lane roadway north of Lincoln Avenue and as a paved four-lane roadway south of Lincoln Avenue with parking restrictions.

Valley Parkway/Del Dios Highway is classified as a Prime Arterial between I-15 and 9th Avenue, and as a Six-Lane Major Road south of 9th Avenue. Valley Parkway generally provides six lanes north of Ninth Avenue, four lanes between Ninth Avenue and Eleventh Avenue and two lanes between Via Rancho Parkway and Eleventh Avenue. Bike lanes exist for both directions of travel on West Valley Parkway. Curbside parking is generally not permitted.

Vineyard Avenue is classified as a Four-Lane Collector in the City of Escondido Circulation Element. Currently, it is a two-lane road with a center two-way left-turn lane from Citracado Parkway to Andreasen Drive. Parking is permitted along both curbs. The posted speed limit on Vineyard Drive is 40 mph.

Enterprise Street is a paved two-lane roadway from Mission Road to Vineyard Avenue in the City of Escondido. Enterprise Street is classified as a Collector in the City of Escondido Circulation Element. Parking is permitted on both sides of the road.

Southern Route to Escondido Substation. This route would follow the “Central East Substation to Peñasquitos Substation” route described above, diverging from the proposed route at the Chicarita Substation. From the existing Chicarita Substation, the route would turn north along existing 230 kV and 69 kV transmission lines for approximately 6.2 miles. Upon entering San Dieguito River Planning Area, it would jog west-northwest for 1.0 mile along the existing lines. The route would follow the existing 69 kV line east and north along the west bank of Lake Hodges and crossing in and out of the City of Escondido for another 7.2 miles to terminate at Escondido Substation.

SR56 (Ted Williams Freeway) is a 4-lane State Route east-west interregional freeway facility connecting I-5 to I-15. It has a posted speed limit of 65 miles per hour.

San Dieguito Road is classified as a Collector on the County of San Diego Circulation Element. San Dieguito Road is a two-lane roadway. The posted speed limit on San Dieguito Road is 45 and 50 mph.

Del Dios Highway/Paseo Delicias is classified as a Light Collector on the County of San Diego Circulation Element. Del Dios Highway is generally a two-lane undivided roadway with a posted speed limit of 50 mph.

Vineyard Avenue is classified as a Four-Lane Collector in the City of Escondido Circulation Element. Currently, it is a two-lane road with a center two-way left-turn lane from Citracado Parkway to Andreasen Drive. Parking is permitted along both curbs. The posted speed limit on Vineyard Drive is 40 mph.

Table D.9-18 lists the Level of Service for the primary roads affected by the 230 kV Future Transmission System Expansion.

Table D.9-18. Roadway Level of Service Operations – 230 kV Future Transmission System Expansion

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
I-8	Caltrans	150,000	254,000	F	1.69	254,576	F	1.69	0.0
I-805	Caltrans	150,000	194,000	F	1.29	194,576	F	1.29	0.0
I-15	Caltrans	150,000 ^e	223,000	F	1.49	223,368	F	1.49	0.00
Tierra Santa									
Tierra Santa Blvd	City of San Diego	40,000	24,000	C	0.60	24,576	C	0.61	0.01
Barona									
Barona Road	S.D. County	16,200	1000	A	0.06	1576	A	0.09	0.03
Willow Road	S.D. County	16,200	9300	D	0.57	9876	D	0.60	0.03
El Monte/Julian Ave	S.D. County	16,200	3900	B	0.24	4476	C	0.27	0.03
Lake Jennings Park Rd	S.D. County	19,000	12,200	D	0.64	12,776	D	0.67	0.03
Wildcat Canyon Road	S.D. County	16,200	28,450	F	1.76	29,026	F	1.79	0.03
San Vicente Road	S.D. County	16,200	16,500	F	1.02	17,076	F	1.05	0.03
Escondido									
E Grand Avenue	City of Escondido	20,000	13,500	C	0.67	14,076	MID D	0.70	0.03
Valley Centre Road	S.D. County	37,000	5700	A	0.15	6276	A	0.17	0.02
N. Ash Street	City of Escondido	34,200	24,200	C	0.71	24,776	C	0.72	0.01
Centre City Parkway	City of Escondido	37,000	33,000	D	0.89	33,576	D	0.90	0.01
W Valley Parkway	City of Escondido	37,000	29,400	C	0.80	29,976	MID D	0.81	0.01
Vineyard Street	City of Escondido	20,000	15,400	MID D	0.77	15,976	MID D	0.79	0.02
Enterprise Street	City of Escondido	15,000	5200	B	0.34	5576	B	0.37	0.03
SR76	S.D. County	16,200	1270	A	0.08	1846	A	0.11	0.03
SR79	S.D. County	16,200	3250	B	0.20	3826	B	0.23	0.03
County Hwy S6	City of Escondido	37,000	27,400	C	0.74	27,976	C	0.76	0.02
SR56 (Ted Williams)	Caltrans	80,000	70,000	E	0.87	70,576	E	0.88	0.01
Del Dios Highway	County of SD	16,200	20,270	F	1.25	20,846	F	1.28	0.03
San Dieguito Road	County of SD	16,200	12,990	E	0.80	13,566	E	0.83	0.03

a. Average daily traffic.

b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

e. General Planning Level Capacity of 4-lane Freeway

D.9.11.2 Environmental Impacts – 230 kV Future Transmission System Expansion

The 230 kV Future Transmission System Expansion (FTSE) projects, if constructed, would be built by SDG&E because they are located within SDG&E's service territory. While it is likely that SDG&E would implement APMs similar to those that are included in the Sunrise Powerlink application, this cannot be assumed because SDG&E has not submitted an application to construct these projects. As a result, the APMs that were presented for the Proposed Project are converted to and recommended as mitiga-

tion measures in this section. This analysis also recommends mitigation measures similar to those that are recommended for the Proposed Project.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Environmental Impacts and Mitigation Measures

Construction Impacts

A transmission line project would substantially affect the ground transportation system (roads and railroads) during construction. The primary construction activities for overhead transmission that would affect the transportation system would be the installation of towers and the stringing of conductors, as these activities would interface with the public roadway system at numerous locations along the Future Expansion project routes. For underground segments, construction activities affecting the transportation system would be trenching, storage, or transport of trench spoils; transport and storage of construction materials; and repaving of paved roadways (Section D.9.5). The anticipated impacts for the FTSE are outlined below.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Construction of the FTSE would result in roadway closures at locations where the construction activities, especially transmission line stringing and underground construction, would be located within ROWs of public streets and highways. The future expansion 230 kV lines would require transmission line stringing over several State highways, County of San Diego roads, and various city roads. In addition, delivery of large equipment and materials via truck would require temporary road or lane closures.

Prior to conducting work within or above a road ROW, an encroachment permit or similar authorization would be required by the applicable jurisdictional agency at locations where the construction activities would occur within or above the public road ROW. The specific requirements of the applicable transportation agency may require traffic safety measures at encroachment locations, including detouring all traffic off the roadway at the construction location or implementation of a controlled continuous traffic break while stringing operations are performed. Encroachment permits would also restrict road closures to off-peak periods to avoid excessive traffic congestion, where necessary. The specific agency requirements would be included as stipulations in the required encroachment permits. Road and lane closures would be a significant impact (Class II). Mitigation Measure T-1a (Restrict lane closures) and Mitigation Measure T-1b (Prepare detour plans) would apply. Implementation of Mitigation Measure T-1a and T-1b would reduce the impacts of temporary road and lane closures because road and lane closures would be restricted and detours allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

T-1b Prepare detour plans. Detour plans shall be submitted to the counties, Caltrans, and/or other appropriate jurisdiction. Within the ABDSP, a Right-of-Entry (ROE) permit is required for any construction and maintenance activities that would occur outside of existing easements, including access roads. SDG&E will provide California State Parks a request in writing for maintenance or other earth-disturbing activities. [T-APM-2b]

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

Construction activities would interfere with emergency response by ambulance, fire, paramedic, and police vehicles. The roadway segments that would be most impacted would be two-lane roadways, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion would lengthen the response time required for emergency vehicles passing through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. The implementation of Mitigation Measure T-2a, requiring coordination in advance with emergency service providers to avoid restricting movements of emergency vehicles, would minimize this impact because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures in order to develop alternative routes and adjust service areas and destinations as necessary to maintain emergency service coverage and response times.

Mitigation Measure for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers

T-2a Coordinate with Emergency Service Providers. SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The counties and cities will then notify respective police, fire, ambulance and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing and duration of any construction activities and advise of any access restrictions that could impact their effectiveness. [T-APM-4a]

Impact T-3: Construction would temporarily disrupt bus transit services (Class II)

Construction activities would affect bus operations within the project vicinity. In addition, transit and school bus routes would be affected by construction activities. If necessary, bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. The implementation of Mitigation Measure T-3a, requiring consultation with transit services and school districts at least one month prior to construction to coordinate construction activities adjacent to bus stops, would minimize this impact because school districts and transit systems will be able to develop alternative routes and/or bus stops avoiding the construction zone.

Mitigation Measure for Impact T-3: Construction would temporarily disrupt bus transit services

T-3a Consult with bus and transit services. SDG&E shall consult with the County Offices of Education, and any affected local school district at least one month prior to construction to coordinate construction activities adjacent to school bus routes and stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. SDG&E will also consult with Imperial Valley Transit, Metropolitan Transit System and any other affected transit system at least one month prior to construction to reduce potential interruption of transit services. [T-APM-5a]

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bike routes were blocked. Implementation of Mitigation Measure T-4a (Ensure pedestrian and bicycle circulation and safety) would minimize this impact.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Construction activities involving trenching in roadways for the installation of underground transmission lines would result in physical damage to the roads. Construction activities would also result in impacts associated with physical damage to roads from construction vehicles entering and leaving the roadways. Additionally, unexpected damage would occur on the roadways by vehicles and equipment transportation. Implementation of Mitigation Measure T-5a (Repair damaged roads) would reduce this impact to less than significant level because all roadways damaged would be repaired to pre-construction conditions.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class II)

Construction activities would interfere with rail operations. Railway service in the Coastal Link vicinity includes the SD&AE Railroad. The stringing of transmission line or other construction activities within the railroad ROW could temporarily affect rail operations. This would be a significant impact. Under Mitigation Measure T-6a, SDG&E would be required to comply with the regulations and procedures of the SD&AE Railroad relative to disruption to rail service or safety and obtain all appropriate permits thereby, reducing this impact to less than significant.

Mitigation Measure for Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations

T-6a Obtain railroad right-of-way permit. SDG&E shall obtain ROW encroachment permits for entering and/or construction on or near Union Pacific Railroad, San Diego & Arizona Eastern Railroad, U.S. Gypsum Mine and any other railroad ROW entered. [T-APM-8a]

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class II)

Construction activities would result in short-term elimination of parking spaces immediately adjacent to the construction ROW and at construction staging areas. SDG&E has committed to implementing T-APM-6a and 6b as part of the Proposed Project. These would limit the potential impacts because PSG&E would be required comply with county requirements regarding parking. However, in some circumstances, construction may still eliminate parking spaces (Class II). Implementation of county parking

guidelines along county-maintained roadways as indicated in approved traffic control plans and implementation of Mitigation Measure T-7a (Notify public of potential short-term elimination of parking spaces) would minimize the effect of this impact because alternative parking would be made available and the public would be notified in advance.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-8: Construction would conflict with planned transportation projects (Class III)

Construction activities would conflict with improvement projects along one or more of the numerous roadways/transportation corridors along the Future Expansion project routes. An encroachment permit or other such agreement must be obtained for each location where the project would interface with a roadway or other transportation facility. Complying with local permits and agreements would ensure appropriate coordination between SDG&E and the affected agencies prior to construction so that conflicts would be avoided or minimized by rescheduling or relocating construction activities.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the 230 kV FTSE would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils. Impacts related to the generation of construction traffic would be temporary. Although the project would add fewer than 200 trips per day to this road segment, and therefore does not result in a significant direct impact to the 230 kV FTSE route roadway segments based on the County's significance criteria, the project would incrementally add traffic to the existing unacceptable LOS on the 8 roadway segments that currently operate below acceptable LOS (Class II). Of the 23 roadways associated with the 230 kV FTSE route, there are 8 roadways that currently operate below acceptable levels of service (LOS). Therefore, implementation of Mitigation Measure T-9a (Prepare Construction Transportation Management Plan) would ensure that significant impacts of decreased LOS on area roadways are reduced to less than significant levels by submitting for approval a CTMP to the affected city and/or county which would include detours, alternative routes and other measures to reduce additional traffic during construction. In addition to Mitigation Measure T-9a SDG&E would be required to pay the County's Transportation Impact Fee to fund its fair share of this traffic condition.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction would restrict access to properties and businesses (Class II)

Underground construction on roadways would restrict access to properties and other neighboring roadways. Mitigation Measure T-10a, requiring that construction crews be able to quickly lay a temporary steel plate trench bridge upon request in order to ensure property and roadway access to residents and businesses, would minimize this impact because access would be provided at all times.

Mitigation Measure for Impact T-10: Underground construction would restrict access to properties and businesses

T-10a **Ensure access to properties and businesses.** SDG&E or its construction contractors shall provide at all times the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to businesses and residences and shall provide continuous access to properties when not actively constructing the underground cable alignment. [T-APM-10a]

Operational Impacts

The potential impacts associated with operation of the 230 kV FTSE would be similar to the issues described for the Proposed Project. SDG&E would need to inspect and maintain the proposed lines and substation throughout the year. Aerial inspection of the 230 kV FTSE would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. It is assumed that one or two light duty trucks would travel to the substation on a weekly basis. Overall, project operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III) because the regional and local roadway LOS would not decrease due to operation of the Central East Substation to Mission Substation, Los Coches Substation, or the Escondido Substation. Traffic delays are not expected to significantly impact regional and local roadway LOS, and roadways are not expected to noticeably incur significant physical damage among other impacts.

D.9.11.3 Environmental Setting – 500 kV Future Transmission System Expansion

As described in Section B.7.2 and illustrated in Figure B-12b, the potential Future 500 kV Circuit would connect the proposed Central East Substation to the Southern California Edison (SCE) transmission system at a new substation north of Interstate 15 (I-15), about 20 miles west of SCE's Valley Substation.

The potential future 500 kV circuit would exit the proposed Central East Substation, running northwest to parallel the existing 69 kV line past the Warners Substation. It would then follow the existing Warners-Rincon 69 kV transmission line past Lake Henshaw, hugging the lake's northern banks until it would meet SR76. The route would continue to follow the existing 69 kV line and generally following SR76 for approximately 12 miles to Rincon Substation. From Rincon, the route would continue west along the existing Rincon-Lilac 69 kV transmission line for approximately 9.5 miles across Valley Center and meet the existing Talega-Escondido 230 kV transmission line west of Lilac Substation. The route would parallel the existing 230 kV line north for approximately 13 miles, turning west with the existing corridor near the community of Rainbow. After another 16 miles, the potential future route would be between the northern boundary of Camp Pendleton Marine Corps Base and Cleveland National Forest, still following the Talega-Escondido corridor.

From Camp Pendleton, the route would follow the LEAPS Project 500 kV transmission line route to connect to SCE's existing Serrano-Valley 500 kV transmission line. The LEAPS Project route for the 500 kV line is as defined by the 33-mile "staff alternative" in the January 2007 Final EIS. The northern end of the 500 kV line would interconnect with SCE's 500 kV transmission system at a new substation north of Interstate 15 (I-15), about 20 miles west of SCE's Valley Substation.

The southern portion of the LEAPS route would be about 18.9 miles long with almost its entire length within the Trabuco Ranger District of the Cleveland National Forest, Camp Pendleton, and BLM lands. It would pass the Tenaja Ranger Station, swerving northwest, around the Forest Wilderness. It would

continue north within the Forest, generally in a northwesterly direction. It would be underground for about 2.1 miles through a popular hang-gliding area, transitioning to overhead at a point about 1.7 miles south of SR74 along South Main Divide Road. The overhead line would continue north along South Main Divide Road, crossing SR74 (Ortega Highway), and crossing into Orange County. It would leave the Forest in a northeasterly segment that crosses I-15 to an interconnection point with the existing SCE Valley-Serrano 500 kV line.

500 kV FTSE Central East Substation to Future Switching Station

This section describes the potential roadways that would be affected by the 500 kV FTSE. The major regional transportation route in this area is I-15, SR76, and SR79 which are under the jurisdiction of the California Department of Transportation (Caltrans). All of the other roadways are under the jurisdiction of San Diego County. Table D.9-19 lists the roadway, classification, traffic volumes, and the position of transmission lines.

Ortega Avenue is a two-lane undivided roadway in the County of San Diego.

Grand Avenue is a two-lane undivided roadway in the County of San Diego.

De Luz Road is a two-lane undivided roadway in the County of San Diego.

South Mission Road is classified as a Collector Road on the County of San Diego Circulation Element. It is currently a two-lane undivided roadway north of Pala Road. The posted speed limit is generally 50 mph.

Pala Temecula Road (S16) is classified as a rural 2-lane collector and is currently built as a two-lane undivided roadway. Pala Temecula Road connects the City of Temecula to SR76 attracting visitors to the nearby Indian casinos. The speed limit is posted at 45 mph.

Old Castle Road is currently built as a two-lane undivided roadway. The speed limit is posted at 45 mph.

Cole Grade Road is classified as a Collector Road on the County of San Diego Circulation Element. Currently Cole Grade Road is built as a two-lane undivided roadway. Parking is prohibited and no bike lanes or bus stops are provided.

Valley Center Road is classified as a Collector Road on the County of San Diego Circulation Element. It is currently a two-lane undivided roadway between SR76 and Lake Wohlford Road. The posted speed limit ranges from 45 to 55 mph with bus stops provided intermittently. Bike lanes are not provided and curbside parking is prohibited.

SR6 is a two-lane northeast-west paved highway which runs through Escondido to Valley Center.

E Grade Road (S7) is a two-lane undivided roadway in the County of San Diego.

I-15 is an eight- to ten-lane freeway traversing the San Diego metropolitan region in a north-south direction with a posted speed limit of 65 mph. This freeway also includes two high-occupancy vehicle lanes in the median between SR163 and SR56. The new 500 kV line crosses I-15 in the town of Rainbow and again as it leaves the Cleveland National Forest prior to termination at the Future Switching Station.

State Route 76 (SR76) is a paved two-lane highway in north-central San Diego County providing access to Lake Henshaw in the eastern San Diego County and Oceanside in the western San Diego County.

SR79 is a paved north-south two-lane highway traversing central San Diego County. The new 500 kV line crosses SR79 at Warners Substation.

San Diego County Highway S2 (San Felipe Road) is a paved two-lane highway stretching from the San Diego–Imperial County line in a northwesterly direction to north-central San Diego County and terminating at SR79, south of Warner Springs. The new 500 kV line crosses S2 at the Central East Substation.

Table D.9-19 lists the Level of Service for the primary roads affected by the 500 kV Future Transmission System Expansion.

Table D.9-19. Roadway Level of Service Operations – 500 kV Future Transmission System Expansion

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
E Grade Road	County of San Diego	16,200	1000	A	0.06	1576	A	0.09	0.03
S6	County of San Diego	16,200	8400	D	0.52	8976	D	0.55	0.03
Cole Grade Road	County of San Diego	16,200	10,900	E	0.67	11,476	E	0.70	0.03
Old Castle Road	County of San Diego	16,200	7100	D	0.44	7676	D	0.47	0.03
S16	County of San Diego	16,200	9120	D	0.56	9696	D	0.60	0.04
S. Mission Road	County of San Diego	16,200	18,300	F	1.12	18,896	F	1.16	0.04
De Luz Road	County of San Diego	16,200	2800	B	0.17	3376	B	0.21	0.04
Grand Avenue	County of San Diego	16,200	1000	A	0.06	1576	A	0.09	0.03
Ortega Highway	County of San Diego	16,200	1000	A	0.06	1576	A	0.09	0.03

a. Average daily traffic.

b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

D.9.11.4 Environmental Impacts – 500 kV Future Transmission System Expansion

Impact conclusions for the 500 kV Future Transmission System Expansion (FTSE) assume that SDG&E would implement APMs similar to those that are included in the SRPL application.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Environmental Impacts and Mitigation Measures

Construction Impacts

A transmission line project would substantially affect the ground transportation system (roads) during construction. The primary construction activities for overhead transmission that would affect the trans-

portation system would be the installation of towers and the stringing of conductors, as these activities would interface with the public roadway system at numerous locations along the 500 kV FTSE project route. For underground segments, construction activities affecting the transportation system would be trenching, storage, or transport of trench spoils; transport and storage of construction materials; and repaving of paved roadways (refer to Section D.9.5). The anticipated impacts for the 500 kV FTSE are outlined below.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II and III)

Construction of the 500 kV FTSE would result in roadway closures at locations where the construction activities, especially transmission line stringing and underground construction, would be located within ROWs of public streets and highways. The 500 kV FTSE lines would require transmission line stringing over State highways, County of San Diego roads, and various city roads. In addition, delivery of large equipment and materials via truck would require temporary road or lane closures. Temporary closures of this nature would likely occur for a limited time (few minutes to an hour).

Prior to conducting work within or above a road ROW, an encroachment permit or similar authorization would be required by the applicable jurisdictional agency at locations where the construction activities would occur within or above the public road ROW. The specific requirements of the applicable transportation agency may require traffic safety measures at encroachment locations, including detouring all traffic off the roadway at the construction location or implementation of a controlled continuous traffic break while stringing operations are performed. Encroachment permits would also restrict road closures to off-peak periods to avoid excessive traffic congestion, where necessary. The specific agency requirements would be included as stipulations in the required encroachment permits. Mitigation Measure T-1a (restrict lane closures) and Mitigation Measure T-1b (detour plans) would also apply. Implementation of Mitigation Measure T-1a and T-1b would reduce the impacts of temporary road and lane closures because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

T-1b Prepare detour plans. [T-APM-2b]

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

Construction activities would interfere with emergency response by ambulance, fire, paramedic, and police vehicles. The roadway segments that would be most impacted would be two-lane roadways, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion would lengthen the response time required for emergency vehicles passing through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. The implementation of Mitigation Measure T-2a, requiring coordination in advance with emergency service providers to avoid restricting movements of emergency vehicles, would minimize this impact because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures in order to develop alternative routes and adjust service areas and destinations as necessary to maintain emergency service coverage and response times.

Mitigation Measure for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers

T-2a Coordinate with Emergency Service Providers. [T-APM-4a]

Impact T-3: Construction would temporarily disrupt bus transit services (Class II)

Construction activities would affect bus operations within the project vicinity. In addition, transit and school bus routes would be affected by construction activities. If necessary, bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. The implementation of Mitigation Measure T-3a, requiring consultation with transit services and school districts at least one month prior to construction to coordinate construction activities adjacent to bus stops, would minimize this impact because school districts and transit systems will be able to develop alternative routes and/or bus stops avoiding the construction zone. With mitigation, the impact would be less than significant.

Mitigation Measure for Impact T-3: Construction would temporarily disrupt bus transit services

T-3a Consult with bus and transit services. [T-APM-5a]

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bike routes were blocked. Implementation of Mitigation Measure T-4a (ensure pedestrian and bicycle circulation and safety) would minimize this impact.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Construction activities involving trenching in roadways for the installation of underground transmission lines would result in physical damage to the roads. Construction activities would also result in impacts associated with physical damage to roads from construction vehicles entering and leaving the roadways. Additionally, unexpected damage would occur on the roadways by vehicles and equipment transportation. Implementation of Mitigation Measure T-5a (repair damaged road) would reduce this impact to less than significant level because all roadways damaged would be repaired to pre-construction conditions.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class II)

Construction activities would result in short-term elimination of parking spaces immediately adjacent to the construction ROW and at construction staging areas. Implementation of County parking guidelines along County-maintained roadways as indicated in approved traffic control plans and implementa-

tion of Mitigation Measure T-7a (notify public of potential short-term elimination of parking spaces) would minimize the effect of this impact because alternative parking would be made available and the public would be notified in advance.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-8: Construction would conflict with planned transportation projects (Class III)

Construction activities would conflict with improvement projects along one or more of the numerous roadways/transportation corridors along the 500 kV FTSE project route. An encroachment permit or other such agreement must be obtained for each location where the project would interface with a roadway or other transportation facility. Complying with local permits and agreements would ensure appropriate coordination between SDG&E and the affected agencies prior to construction so that conflicts would be avoided or minimized by rescheduling or relocating construction activities.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the 500 kV FTSE would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils. Impacts related to the generation of construction traffic would be temporary. Although the project would add fewer than 200 trips per day to this road segment, and therefore does not result in a significant direct impact to the 500 kV FTSE route roadway segments based on the County's significance criteria, the project would incrementally add traffic to the existing unacceptable LOS on the 2 roadway segments that currently operate below acceptable LOS (Class II). Of the 9 roadways associated with the 500 kV FTSE route, there are 2 roadways that currently operate below acceptable levels of service (LOS). Therefore, implementation of Mitigation Measure T-9a (Prepare Construction Transportation Management Plan) would ensure that significant impacts of decreased LOS on area roadways are reduced to less than significant levels by submitting for approval a CTMP to the affected city and/or county which would include detours, alternative routes and other measures to reduce additional traffic during construction. In addition to Mitigation Measure T-9a SDG&E would be required to pay the County's Transportation Impact Fee to fund its fair share of this traffic condition.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction would restrict access to properties and businesses (Class II)

Underground construction on roadways would restrict access to properties and other neighboring roadways. Mitigation Measure T-10a, requiring that construction crews be able to quickly lay a temporary steel plate trench bridge upon request in order to ensure property and roadway access to residents and businesses, would minimize this impact because access would be provided at all times.

Mitigation Measure for Impact T-10: Underground construction would restrict access to properties and businesses

T-10a **Ensure access to properties and businesses.** [T-APM-10a]

Operational Impacts

The potential impacts associated with operation of the future transmission system expansion facilities would be similar to the issues described for the Proposed Project. SDG&E would need to inspect and maintain the lines throughout the year. Aerial inspection of lines would occur three times a year. Climbing inspections of the transmission facilities would occur once every three years. Overall, these operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III) there would not significantly increase traffic on regional or local roadways nor would operation and maintenance significantly add to disruption of traffic flow.

D.9.12 Connected Actions and Indirect Effects

It cannot be assumed that APMs adopted by SDG&E for the Proposed Project would be adopted by proponents of connected actions and indirect effects, because applications to construct these projects have not been submitted. As a result, the APMs that were presented for the Proposed Project are converted to and recommended as mitigation measures in this section. This analysis also recommends mitigation measures similar to those that are recommended for the Proposed Project.

Section B.6 describes the other projects that have been found to be related to the Sunrise Powerlink Project. They fall into two categories:

- **Connected Actions.** The four projects found to be connected to the Sunrise Powerlink Project are the Stirling Energy Systems solar facility, two components of the IID 230 kV transmission system upgrades, the Esmeralda–San Felipe Geothermal Project, and the Jacumba Substation. Those projects are described in Sections D.9.12.1 through D.9.12.4.
- **Indirect Effects.** One project, the SCE La Rumorosa Wind Project, would create effects as a result of the construction and operation of the Sunrise Powerlink Project. That project is addressed in Section D.9.12.5.

D.9.12.1 Stirling Energy Systems Solar Two LLC Project

As agreed in a Power Purchase Agreement (PPA) approved by the CPUC, SDG&E would purchase up to 900 MW of solar power produced at a proposed 8,000-acre Concentrating Solar Power (CSP) facility in the Imperial Valley (see Section B.6.1). At least 600 MW of this total would be transmitted via the SRPL. Stirling Energy Systems (SES) Solar Two, LLC would construct, own and operate the CSP facility and an associated 230 kV transmission line. The CSP site would be leased by SES from BLM, and additional individual private parcels within the site boundaries would be acquired. The transmission line would be constructed within a new ROW easement just north of and adjacent to the SWPL.

As described in Section B.6, the CPUC and BLM have determined that the Stirling CSP facility and associated 230 kV transmission line are so closely related to the Proposed Project as to be considered “connected actions” under the National Environmental Policy Act (NEPA). Therefore, the Stirling site and transmission line are discussed in this EIR/EIS in order to fully disclose the potential for this project to be constructed as a result of the presence of the SRPL (if it is approved and constructed).

Approval of the SRPL would not result in automatic approval of the Stirling CSP facility or transmission line discussed below, and the project would require SES permit applications to CEC and BLM and compliance with CEQA and NEPA, followed by approvals from the CEC and BLM prior to construction on BLM lands.

Environmental Setting

The regional transportation route in this area is Interstate 8 (I-8), which is under the jurisdiction of the California Department of Transportation (Caltrans). All of the other roadways are under the jurisdiction of Imperial County. Interstate 8 is the main east-west freeway in Imperial and San Diego Counties. Within Imperial County, I-8 is a four-lane divided highway with a posted speed limit of 70 miles per hour (mph). The transmission line route would cross I-8 approximately one mile west of the Dunaway Road interchange (MP GT-7) as an overhead transmission line.

Imperial County Highway S80 (Evan Hewes Highway) is a paved two-lane east-west highway that is located adjacent to the north side of the Arizona and San Diego Railroad ROW that borders the northern edge of the SES site. A short railroad spur track would be constructed onsite and interconnect with the main railway. Dunaway Road, which traverses the SES site at its eastern end, is a two-lane north-south roadway.

SES plans to construct permanent gravel access roads between every other row of solar-concentrating dishes at the site; the areas in between rows would not have access for motor vehicles. SES expects some foot traffic and some truck traffic on gravel roads associated with the washing maintenance process. All traffic would be internal to the site, and public access would be prohibited.

Table D.9-20 lists the level of service operation for the major roadways affected by the Stirling project.

Table D.9-20. Roadway Level of Service Operations – Stirling Energy Systems

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Evan Hewes Hwy S80 (near Plaster City)	Imperial County	16,200	920	A	0.06	1,496	A	0.09	0.03
I8 at MP6	Imperial County	80,000 ^e	18,900	A	0.23	19,476	A	0.24	0.01

a. Average daily traffic.

b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

There are no transit operations within the projects vicinity nor residential receptors, so construction of the transmission line would not likely cause schedule delays and bus stop closures and/or temporary bus stop relocations (Impact T-3: Construction would temporarily disrupt bus transit services). Construction activities would result in short-term elimination of a limited amount of parking spaces immediately adjacent to the construction ROW or near the SES site. However, staging areas could be used for temporary parking and the area along the route and at the SES site is extremely isolated so parking issues should not occur (Impact T-7: Construction would result in the short-term elimination of parking spaces).

Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur for the Stirling Project, because there are no planned transportation projects within the study area that would conflict with construction activities. In addition, underground construction is not planned for either project, and therefore, no impacts would result from restricting access to properties and businesses from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

This alternative would cross I-8, County Highway S80, and local roadways. Transmission stringing operations will require the roadways to be shut down for unspecified periods of time. The SES transmission line route would require transmission line stringing over I-8, as well as stringing over various Imperial County roads. In addition, delivery of large equipment and materials via truck may require temporary lane and road closures. Temporary lane and road closures of this nature would occur for only a few minutes at a time.

Prior to conducting work within or above a road ROW, an encroachment permit or similar authorization would be required by the applicable jurisdictional agency at locations where the construction activities would occur within or above the public road ROW. The specific requirements of the applicable transportation agency may include traffic safety measures at encroachment locations, including detouring all traffic off the roadway or implementing a controlled continuous traffic break while stringing operations are performed. Encroachment permits would also restrict road closures to off-peak periods to avoid excessive traffic congestion. Where necessary, the specific agency requirements would be included as stipulations in the required encroachment permits. Impacts associated with short-term road closures would be significant but mitigable to a level less than significant (Class II) with appropriate mitigation measures. To ensure that roads are not unnecessarily impacted during construction the following mitigation measures would be required.

Mitigation Measures for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

- T-1a** **Restrict lane closures.**
- T-1b** **Prepare detour plans.** [T-APM-2b]
- T-1c** **Obtain required permits.** Stirling shall obtain required permits for the temporary lane closures from the responsible jurisdiction(s) prior to any construction activities. [T-APM 2a]

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

Construction activities would interfere with emergency response by ambulance, fire, paramedic, and police vehicles if lane and/or road closures restricted their effectiveness, resulting in a significant impact (Class II). Roadway segments that would be most impacted would be two-lane roadways, such as Old Highway 80

and Dunaway Road, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion could lengthen the response time for emergency vehicles to pass through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. Mitigation Measure T-2a would be required to reduce the impact of a temporary disruption of the operation of emergency service providers. This measure would reduce the impact to less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures and would be able to develop alternative routes.

Mitigation Measures for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers

T-2a **Coordinate with Emergency Service Providers.** [T-APM-4a]

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class III)

Because of the Stirling project location, pedestrian and bicycle circulation would not be affected by transmission line construction activities. Therefore, impacts would be less than significant (Class III, and no mitigation would be required.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area, resulting in a significant impact (Class II). Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels because all roadways would be repaired to their pre-construction conditions.

Mitigation Measures for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a **Repair damaged roads.**

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class II)

Construction activities would interfere with rail traffic if it requires a temporary closure of railroad ROW. Trucks with large equipment would likely enter the site from Old Highway 80, which is north of the railroad and would thus have to cross the tracks. Finally, construction of a short railroad spur track to interconnect with the main railway could interfere with the existing track or operations. This would be a significant impact. Implementation Mitigation Measure T-6a would require a railroad ROW permit, which would ensure that impacts on rail traffic operations would be less than significant (Class II) because encroachment and ROW permits which include safety measures would be obtained prior to construction.

Measures for Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations

T-6a **Obtain railroad right-of-way permit.** [T-APM-8a]

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the project would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils. Impacts related to the generation of construction traffic would be temporary; however, on roads that currently operate below acceptable levels of service (LOS), such as I-8, this impact would be significant (Class II). Implementation of Mitigation Measure T-9a would reduce impacts to regional and local roadways to less than significant since the Construction Transportation Management Plan would include alternate traffic routes, timing of commutes, reduction in crew related traffic and other mitigation methods for reducing construction generated additional traffic on regional and local roadways.

Mitigation Measures for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

The Stirling CSP facility would require on-going operations and maintenance. The transmission line associated with the facility would need to be inspected and maintained. The energy facility itself would require staff to operate the facilities and to maintain and replace equipment as necessary. However, the staff would be small and, given the rural nature of the facility setting, these operations would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III). There would be no significant increase traffic on regional or local roadways nor would operation and maintenance significantly add to disruption of traffic flow.

D.9.12.2 IID Transmission System Upgrades

As part of Phase 2 of the Imperial Valley Study Group's development plan (see Section A.4.3), IID would construct a new 230 kV line from the Bannister Substation to a new San Felipe 500/230 kV Substation to interconnect to the proposed Imperial Valley to San Diego 500 kV line (i.e., the Sunrise Powerlink line). This San Felipe Substation could provide an additional interconnection between the IID and CAISO systems, and thus another point for the delivery of renewable resources to Southern California loads. IID would construct, own and operate these upgrades.

As described in Section B.6, the CPUC and BLM have determined that these IID Transmission System Upgrades are so closely related to the Proposed Project as to be considered "connected actions" under the National Environmental Policy Act (NEPA). Therefore, IID Transmission System Upgrades are discussed in this EIR/EIS in order to fully disclose the potential for a Bannister-San Felipe 230 kV transmission line and new San Felipe 500/230 kV Substation to be constructed as a result of the presence of the SRPL (if it is approved and constructed). Approval of the SRPL would not result in automatic approval of the IID Transmission System Upgrades discussed below. The projects would require applications by IID, compliance with CEQA and NEPA, followed by approvals from the BLM prior to construction on BLM lands.

Environmental Setting

San Felipe 500/230 kV Substation. Old Kane Springs Road is an unclassified roadway in the County of Imperial Circulation Element. Old Kane Springs Road is an unpaved southeast-northwest two-lane road

in the Lower Borrego Valley stretching from the open desert lands east of Split Mountain Road to SR78. The San Felipe Substation site would be located at southeast end of the road at Split Mountain Road.

IID Bannister–San Felipe 230 kV Transmission Line. State Route 86 (SR86) is a paved two- to four-lane divided highway extending from SR78 in northwestern Imperial County along the southwest shores of the Salton Sea. The Bannister–San Felipe line would follow adjacent to SR86 from MP IID-6 (approximately 2 miles east of the junction SR78 and SR86) to the junction of SR78 and SR86. The 230 kV route would turn westerly at SR78.

State Route 78 is a paved two- to four-lane, primarily east-west highway traversing north-central San Diego and Imperial Counties. The 230 kV route would follow SR78 westward between MP IID-8.1 to MP IID-15.1. State Route 86 and 78 are under the jurisdiction of Caltrans. All of the other roadways are under the jurisdiction of Imperial County.

Table D.9-21 lists the level of service operation for the major roadways affected by the IID Transmission System Upgrades.

Table D.9-21. Roadway Level of Service Operations – IID Transmission System Upgrades

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
SR78	Imperial County	37,000	1400	A	0.037	1976	A	0.053	0.016
SR86	Imperial County	37,000	11,400	A	0.308	11,976	A	0.323	0.015
Old Kane Springs Road	San Diego County/ Imperial County	ND	ND	ND	ND	ND	ND	ND	ND
Split Mountain Road	San Diego County	16,200	800	A	0.05	1,376	A	0.08	0.03

a. Average daily traffic.

b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

There are no transit operations within the projects vicinity nor residential receptors, so construction of the transmission line would not cause schedule delays and bus stop closures and/or temporary bus stop relocations (Impact T-3: Construction would temporarily disrupt bus transit services). In addition the 230 kV transmission line route would not cross or parallel any railway and therefore, Impact T-6: (Construction activities would cause a temporary disruption to rail traffic or operations) would not occur.

Construction activities would result in short-term elimination of a limited amount of parking spaces immediately adjacent to the construction ROW or near the substation site. However, staging areas could be used for temporary parking and the area along the route and at the substation site is extremely isolated

so parking issues would not occur (Impact T-7: Construction would result in the short-term elimination of parking spaces).

Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur for the IID Transmission System Upgrades, because there are no planned transportation projects within the study area that would conflict with construction activities. In addition, underground construction is not planned for either project, and therefore, no impacts would result from restricting access to properties and businesses from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Construction of the IID Upgrades would result in roadway closures at locations where the construction activities, especially transmission line stringing, would be located within ROWs of public streets and highways. The Imperial Valley Link would require transmission line stringing over SR86, as well as stringing over various Imperial County roads. In addition, delivery of large equipment and materials via truck may require temporary road and lane closures. Temporary closures of this nature would occur for only a few minutes at a time.

Prior to conducting work within or above a road ROW, an encroachment permit or similar authorization would be required by the applicable jurisdictional agency at locations where the construction activities would occur within or above the public road ROW. The specific requirements of the applicable jurisdictional agency may include traffic safety measures at encroachment locations, including detouring all traffic off the roadway or implementing a controlled continuous traffic break while stringing operations are performed. Encroachment permits would also restrict road closures to off-peak periods to avoid excessive traffic congestion. Impacts associated with short-term road closures would be significant but mitigable to a level less than significant (Class II) with appropriate mitigation measures. To ensure that roads are not unnecessarily impacted during construction the following mitigation measures would be required. Implementation of Mitigation Measure T-1a, T-1b, and T-1c would reduce the impacts associated with short-term road and lane closures to less than significant by reducing the amount of road and lane closures as well as limiting the amount of time road and lane closures take place.

Mitigation Measures for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

- T-1a Restrict lane closures.**
- T-1b Prepare detour plans. [T-APM-2b]**
- T-1c Obtain required permits.**

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

Construction activities would interfere with emergency response by ambulance, fire, paramedic, and police vehicles if lane and/or road closures restricted their effectiveness, resulting in a significant impact (Class II). Roadway segments that would be most impacted would be two-lane roadways, such as SR78, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion could lengthen the response time for emergency vehicles to pass through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. Mitigation Measure T-2a would reduce the impact of a temporarily disruption of the operation of emergency service providers. This type of measure

would reduce the impact to less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures and would be able to develop alternative routes.

Mitigation Measures for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

T-2a Coordinate with Emergency Service Providers. [T-APM-4a]

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class III)

Because of the Upgrade locations, pedestrian and bicycle circulation would not be affected by transmission line construction activities. Therefore, impacts would be less than significant (Class III) and no mitigation measures would be required.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area, resulting in a significant impact (Class II). Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the project would temporarily increase traffic (project trip generation) on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials such as support structures and poles, concrete, fill, and excavation spoils. Impacts related to the generation of construction traffic would be temporary; however, on roads that currently operate below acceptable levels of service (LOS) this impact would be significant (Class II). Implementation of Mitigation Measure T-9a would reduce impacts to regional and local roadways to less than significant since the Construction Transportation Management Plan would include alternate traffic routes, timing of commutes, reduction in crew related traffic and other mitigation methods for reducing construction generated additional traffic on regional and local roadways.

Mitigation Measures for Impact T-9; Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

The IID transmission system upgrades would require on-going maintenance. The transmission line would need to be inspected and maintained. However, this would occur only occasionally and would require small crews. These activities would have a less than significant impact on traffic, circulation, and/or the

level of service on nearby roadways (Class III). There would be no significant increase traffic on regional or local roadways nor would maintenance significantly add to disruption of traffic flow.

D.9.12.3 Esmeralda-San Felipe Geothermal Project

An EIS is currently being prepared by BLM to analyze the leasing of geothermal resources exploration, development, and utilization in the Truckhaven Geothermal Leasing Area (Truckhaven) located in western Imperial County, California (refer to Figure B-46). Currently, BLM has non-competitive geothermal lease applications pending for portions of this land, including lease applications from Esmeralda Energy, LLC (Esmeralda); however, the land must first be assessed under NEPA regulations before granting leases. Under the Proposed Action analyzed in the EIS, BLM would approve the pending non-competitive leases and offer competitive leases for all other available lands at Truckhaven.

The Esmeralda–San Felipe Geothermal Project would develop 20 MW of geothermal resources within the Truckhaven Geothermal Leasing Area; however, Esmeralda is not able to submit a project application to BLM for the Esmeralda–San Felipe Geothermal Project until their pending lease applications with BLM for Truckhaven are approved. In the absence of a formal Project application, it is assumed that roughly half of the components identified under the Reasonably Foreseeable Development (RFD) scenario in BLM’s Truckhaven EIS would apply to the Esmeralda–San Felipe Geothermal Project. Additionally, the description of the environmental setting and likely impacts are partially adapted from the Draft EIS for the Truckhaven Geothermal Leasing Area (February 2007). The RFD describes the anticipated development that would occur at Truckhaven to facilitate geothermal resources exploration, development and utilization should the leases be approved by BLM and include new wells, a power plant and transmission lines, as described in Section B.6.3. Geothermal energy uses heat from the earth, extracted through geothermal wells in the form of steam or brine, which is then transported via pipeline and used to drive turbines, which drive electricity generation.

As described in Section B.6, the CPUC and BLM have determined that the Esmeralda–San Felipe Geothermal Project is so closely related to the Proposed Project as to be considered a “connected action” under the National Environmental Policy Act (NEPA). Therefore, the Esmeralda–San Felipe Geothermal Project is discussed in this EIR/EIS in order to fully disclose the potential for a new geothermal plant and associated pipelines and transmission lines to be constructed as a result of the presence of the SRPL (if it is approved and constructed). Approval of the SRPL would not result in automatic approval of the Esmeralda–San Felipe Geothermal Project discussed below, and the project would require applications by Esmeralda Energy, LLC, compliance with CEQA and NEPA, followed by approvals from the BLM prior to construction on BLM lands.

Environmental Setting

I-8 is the only freeway providing access in the vicinity of the Truckhaven Geothermal Leasing Area. Arterial branch SR78 runs east/west south of Truckhaven. Coming from the east, it turns generally north/south out of Westmorland and splits from SR86 at the Border Patrol Checkpoint and continues west through ABDSP. After splitting from SR78, arterial branch SR86 continues north and traverses the northeastern corner of the Truckhaven area and links with S22 in Salton City before continuing north and eventually merges into the 111 Expressway, which links to I-10. S22 is an east/west county road providing access to the northern portion of the Truckhaven area.

The heaviest traveled segment of roadway is on SR86 north of its intersection with SR78. It has an Average Annual Daily Traffic (AADT) volume of 12,100 vehicles and a peak-hour volume of 1,050

vehicles. The level of service (LOS) on SR78 and SR86 is D, which is a zone that approaches unstable flow, with tolerable operating speeds; however, driving speed is considerably affected by changes in operating conditions. The LOS on S22 is C, the minimum acceptable standard for Imperial County-maintained roadways. LOS C denotes operations where a significant number of vehicles are stopping, creating some backup and light congestion. S22, a County administered road, is subject to different operating criteria than SR86 and SR78, which are State-maintained highways. S22 is a two-lane route classified as a “Major Collector” in the Imperial County General Plan. There are no bus routes (Impact T-3), bicycle routes (Impacts T-4), rail operations (Impact T-6), parking areas (Impact T-7), or planned transportation projects (Impact T-8) that would be affected by the project.

Environmental Impacts and Mitigation Measures

As stated in BLM’s Draft EIS for the Truckhaven Geothermal Leasing Area, the following BMPs and other mitigation measures would be included in Plans of Operation, which are required for surface-disturbing activities, in order to minimize adverse impacts to resources and uses in the Truckhaven Geothermal Leasing Area, which includes the Esmeralda–San Felipe Geothermal Project area:

- The lessee would be required to file a traffic control plan indicating how and where construction traffic would be routed and traffic control measures would be emplaced to ensure accidents do not occur.
- Signs directing vehicles to alternative park access and parking would be posted in the event construction temporarily obstructs recreational parking areas near trailheads.
- Signs and/or flagging that advise recreational users of construction activities would be posted in coordination with BLM and/or Ocotillo Wells SVRA. Whenever active work is being performed, the area would be posted with “construction ahead” signs on any adjacent access roads or trails that might be affected.
- Construction-related traffic would be restricted to routes approved by the authorized agency(ies) (BLM, Ocotillo Wells SVRA).
- Whenever possible, construction activities would be avoided during high recreational use periods.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Although detailed construction plans are not yet available, vehicles would likely access the project area from the north and south of the Truckhaven area via S22 and SR78. Existing dirt roads within the Ocotillo Wells SVRA would need to be improved to accommodate construction vehicles accessing well sites on BLM parcels. At this time, road improvements or access routes have not been determined. Drilling and power plant construction traffic would contribute to the total existing traffic. Additionally, delivery of large equipment and materials via truck may require temporary lane closures along S22 and SR78. Temporary disruption of traffic flow caused by construction vehicles would result in a significant impact (Class II). However, implementation of the mitigation measures listed below would reduce this

impact to a less than significant level because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measures for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

- T-1a Restrict lane closures.**
- T-1b Prepare detour plans. [T-APM-2b]**
- T-1c Obtain required permits.**

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

Construction activities would interfere with emergency response by ambulance, fire, paramedic, and police vehicles if lane and/or road closures restricted their effectiveness (Class II). Roadway segments that would be most impacted would be two-lane roadways, such as S22, which provide one lane of travel per direction. On roadways with multiple lanes, the loss of a lane and the resulting increase in congestion could lengthen the response time for emergency vehicles to pass through the construction zone. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. Mitigation Measure T-2a would reduce the impact of a temporarily disruption of the operation of emergency service providers. This measure would reduce the impact to less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures and would be able to develop alternative routes.

Mitigation Measures for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

- T-2a Coordinate with Emergency Service Providers. [T-APM-4a]**

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area, resulting in a significant impact (Class II). Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

- T-5a Repair damaged roads.**

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction would generate temporary additional traffic on the regional and local roadways. Construction worker commute trips, project equipment deliveries and hauling materials such as support structures and poles, concrete, fill, and excavation spoils would increase traffic volumes in the project area. At any single location, this impact would be short-term. Impacts related to the generation of construction traffic would be temporary; however, on roads that currently operate below acceptable levels of service (LOS), such as on SR78 and SR86, this impact would be significant (Class II). Implementation of Mitigation Measure T-9s would reduce impacts to regional and local roadways to less than significant since

the Construction Transportation Management Plan would include alternate traffic routes, timing of commutes, reduction in crew related traffic and other mitigation methods for reducing construction generated additional traffic on regional and local roadways

Mitigation Measures for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class II)

Underground construction on roadways would restrict access to properties and other neighboring roadways, resulting in a significant impact (Class II). Mitigation Measure T-10a, requiring that construction crews be able to quickly lay a temporary steel plate trench bridge upon request in order to ensure property and roadway access to residents and businesses, would reduce this impact to a less than significant level by ensuring access to properties and businesses.

Mitigation Measure for Impact T-10: Underground construction would restrict access to properties and businesses (Class II)

T-10a Ensure access to properties and businesses. [T-APM-10a]

Operational Impacts

Increases in traffic volume associated with drilling and construction activity would be temporary; upon completion of construction, no operational impacts to the local roadways would occur.

D.9.12.4 Jacumba Substation Project

In its testimony during the CPUC's Phase 1 hearings on the need and economics of the Proposed Project, SDG&E staff stated that a new 230/500 kV substation would be required to allow future wind generation projects to transmit generated power via the existing 500 kV Southwest Powerlink (SWPL) transmission line. The SWPL currently has limited available capacity, but if the Sunrise Powerlink Project is approved and constructed, some electricity currently carried by the SWPL will be transmitted via Sunrise, making more capacity available on the SWPL. There are a number of possible new wind generation projects near the Jacumba area (about 5 miles west of the San Diego/Imperial County line), some in San Diego County (Crestwood wind area) and some in Mexico (La Rumorosa wind area). Therefore, the impacts of this substation are evaluated as part of the Proposed Project.

This 230/500 kV substation would allow incoming transmission lines at 230 kV from wind farms in either the Crestwood or La Rumorosa areas. The power would be transformed to 500 kV in order to allow it to be transmitted via the SWPL to the Miguel Substation in San Diego. The substation is assumed to occupy about 20 acres, and while its location has not been defined by SDG&E, for the purposes of this EIR/EIS it is assumed to be located just east of the point where the Interstate 8 Alternative diverges from the SWPL. The impacts of this substation are also evaluated as a part of the wind component of the Non-Wires In-Area Renewable Generation Alternative, as defined and analyzed in Section E.5. Approval of the SRPL would not result in automatic approval of the Jacumba Substation discussed below, and the project would require applications by SDG&E, and compliance with CEQA and NEPA.

Environmental Setting

The Jacumba 500/230 kV Substation would be located southwest of the Desert Rose Ranch Road, and west of local and private roads running north–south connecting the Desert Rose Ranch Road with the town of Jacumba. Boundary Creek Road borders the town of Jacumba to the north.

Environmental Impacts and Mitigation Measures

All construction activities and associated equipment would be adjacent to the existing SWPL ROW. The road nearest to the proposed site is the access road for the SWPL transmission line. Approximately 0.10 miles from the Jacumba Substation is a private road that could be used to reach the SWPL access road. As the construction would occur adjacent to the access road only, there would be no impacts to road closures (Impact T-1), emergency service providers (Impact T-2), bus transit routes (Impact T-3), pedestrian movement (Impact T-4), road damage (Impact T-5), elimination of parking spaces (Impact T-7), and restricted access to properties (Impact T-10). Modifications to the Jacumba Substation would not effect rail traffic (Impact T-6) or generate additional traffic on the regional roadways (Impact T-9). There are no known transportation projects that would conflict with the construction of the Jacumba Substation (Impact T-8). Therefore, no mitigation is required.

D.9.12.5 SCE La Rumorosa Wind Project

Transportation and Traffic Setting for the RWD Project

United States. A new 230 kV transmission line would be required to connect the “Rumorosa Wind Developers II” (RWD) to the existing 500 kV SWPL (about 10 miles to the north of the existing Tijuana/La Rosita 230 kV Transmission line). The 1.7 miles of new 230 kV transmission line would be sited on primarily private land in San Diego County. Table D.9-22 lists the roads that potentially could be impacted by the RWD project. In addition, the transmission line would cross the San Diego and Arizona Eastern Railroad tracks, which parallel Old Highway 80 in this area. For many smaller or lightly traveled roads, the counties do not collect traffic data. As such, traffic data is unavailable for the roads traversed by and near the 1.7 miles of transmission line in the United States.

Table D.9-22. Public Roadways along the RWD Project, U.S. Portion

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes	
				Year	ADT
Old Highway 80	San Diego County	Rural LC	2	ND	—
Border Creek Road	San Diego County	None	2	ND	—
Desert Rose Ranch Road	San Diego County	None	2	ND	—
North Railroad Street	San Diego County	None	2	ND	—

Mexico. The wind turbines and associated transmission lines would be sited in La Rumorosa, Baja California. While the exact siting of the RWD project towers/turbines and associated facilities is not known, it is assumed that the local roadway network would be used for access to construction areas and the transportation of equipment and materials. Table D.9-23 lists the roads that potentially could be impacted by the RWD project. In addition to the two state highways, there are local unpaved roads that would be potentially affected by the project at the site of the wind turbine, and three local, unpaved roads that would be traversed by the new 230 kV transmission line on new ROW north of Luis Echeverria Alvarez, until reaching the U.S./Mexico border. One of the local unpaved roads is a prominent road connecting Luis Echeverria Alvarez, Jácume, and La Rumorosa.

Table D.9-23. Public Roadways along the RWD Project, Mexico Portion

Roadway	Classification	Existing Lanes	Traffic Volumes	
			Year	ADT
Highway Mexico 2 (toll)	Highway	4	NA	NA
Highway Mexico 2 (free)	Highway	4	NA	NA

NA = Not Available

Transportation and Traffic Impacts for the RWD project

As the areas where the RWD wind farm and transmission line will be built are very rural and not adjacent to local roads, Impact T-7: Construction would result in the short-term elimination of parking spaces, and Impact T-10: Underground construction could restrict access to properties and businesses, would not occur. Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

United States. Construction of the RWD transmission line could result in roadway closures at locations where the construction activities, especially transmission line stringing, cross the ROWs of public streets and highways. The RWD transmission line would require transmission line stringing over Old Highway 80 and potentially over North Railroad Street. In addition, delivery of large equipment and materials via truck would also require temporary closures. Specific encroachment permits would be required for the project. However, road closures would be a significant impact.

To reduce impacts to a less than significant level (Class II), Mitigation Measure T-1a would be required. Together, encroachment permit and these mitigation requirements will ensure that impacts are less than significant.

Mexico. Construction of the wind tower/turbines and associated facilities could result in roadway closures at locations where the delivery of construction materials would require lane closures on public streets and highways. This would be a significant impact. These roadways would be used for equipment, material, and work crew transport to the construction sites. To ensure that impacts are less than significant (Class II), Mitigation Measure T-1a, requiring the development of Detour Plans for any potential long-term lane closures, would be implemented.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class II)

United States and Mexico. Construction activity associated with the RWD project could interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes

are closed or access to residences and businesses is restricted. Roadway segments that would be most impacted would be two-lane roadways (e.g., Old Highway 80) that provide one lane of travel per direction. Additionally, there is a possibility that emergency services would be needed at a location where access is temporarily blocked by the construction zone. Disruption of emergency service providers would be a significant impact without mitigation. Mitigation Measure T-2a, which requires advance coordination with emergency service providers in order to develop alternative routes and adjust service areas and destinations as necessary to maintain emergency service coverage and response times, would mitigate this impact to a less than significant level since emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures prior to construction activities and would be able to maintain emergency service coverage (Class II).

Mitigation Measure for Impact T-2: Construction would temporarily disrupt the operation of emergency service providers

T-2a Coordinate with Emergency Service Providers. [T-APM-4a]

Impact T-3: Construction would temporarily disrupt bus transit services (Class II)

United States and Mexico. Local bus service, as well as local school bus routes could potentially be impacted by the RWD project. Construction activities would potentially cause transit and school bus schedule delays if roadways need to be shut down for prolonged length of time, resulting in a significant impact. Implementation of Mitigation Measure T-3a, which requires consultation with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities, would mitigate this impact to a less than significant level because prior consultation with the bus and transit services would allow alternative routes and stops to be planned eliminating delays from construction (Class II).

Mitigation Measure for Impact T-3: Construction would temporarily disrupt bus transit services

T-3a Consult with bus and transit services. [T-APM-5a]

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety (Class III for the United States; Class II for Mexico)

United States. As the transmission line in the United States is primarily through private property, it is unlikely that pedestrian and bicycle movement would be affected by construction activities. Therefore this impact would be less than significant (Class III) and no mitigation is required.

Mexico. Pedestrian and bicycle movement would be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. This would be a significant impact (Class II). Mitigation Measures T-4a and WR-1b would reduce this impact to less than significant. These measures would ensure that safe alternative routes are designed either through or around the construction zone, facilitating safe passage.

Mitigation Measures for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle movement and safety

T-4a Ensure pedestrian and bicycle movement and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

United States and Mexico. Unexpected damage to roadways may occur from construction activities, construction vehicles, and transport of equipment along the roadways that would be used for construction of the RWD project. Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW (Class II). Mitigation Measure T-5a would require implementation of physical road improvements such as construction/modification of roadways and repaving roadways, thereby reducing this impact to less than significant.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class II for the United States; No Impact for Mexico)

United States. Overhead construction activities along the RWD project transmission line would potentially interfere with rail traffic because construction of the transmission line could require crossing the San Diego and Imperial Valley Railroad as well as the Union Pacific Railroad ROWs. This would be a significant impact (Class II). Mitigation Measure T-6a would require the applicant to obtain permits to enter the railroad ROWs. By complying with the railroad company permit requirements, the impact of the RWD project transmission line on rail traffic operations would be less than significant.

Mexico. The location of the RWD project towers/turbines and associated facilities in Baja California is not serviced or traversed by rail operations (No Impact.)

Mitigation Measure for Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations

T-6a Obtain railroad right-of-way permit. [T-APM-8a]

Impact T-8: Construction would conflict with planned transportation projects (No Impact for the United States, No Available Data for Mexico)

United States. The RWD project would not have impacts related to the conflict with planned transportation projects because there are no known planned transportation projects in the area.

Mexico. There is no available data for any future transportation projects in the region of RWD project. Should there be any transportation projects, the public agencies having jurisdiction over Highway Mexico 2 or any local La Rumorosa roads would be notified of the project, and an encroachment permit or other such agreement must be obtained for each location where the project would interface with a roadway or other transportation facility. Public agencies that are responsible for the roadways in Tecate are the Department of Municipal Transportation (*Departamento de Transportes Municipales,*) the Committee of Transportation (*Comité de Transportes,*) among others. Complying with local permits and agreements would ensure appropriate coordination between the applicant and the affected agencies. It is presumed that impacts would be less than significant, and no mitigation measures would be required, because coordination with appropriate agencies would address any issues prior to construction reducing any potential impacts. However, there are no available data as to any planned transportation projects on the Mexico side of the border.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

United States and Mexico. Construction activities may result in a temporary increase of traffic on the regional and local roadways from construction worker commute trips, project equipment deliveries, and hauling materials to the project area. Impacts to the regional and local traffic would be significant if they lower the LOS (Class II). However, implementation of Mitigation Measure T-9a would reduce impacts to less than significant because a Construction Transportation Management Plan would be prepared which would include measures for alternative routes as well as limiting road and lane closures to off peak hours. With the implementation of Mitigation Measure T-9a traffic congestion would be reduced. It is not expected that construction generated additional traffic will decrease the LOS on roadways within the construction zone.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

United States. Operation and maintenance of the transmission line is not expected to generate additional traffic on roadways or cause traffic delays or lane closures; therefore, the RWD project would have no operational impacts on traffic.

Mexico. RWD Project operations would have a less than significant impact on traffic, circulation, and/or the level of service on roadways. Project operations would not cause emergency access restrictions, affect parking capacity, or increase roadway hazards. Additionally, air traffic patterns would not be affected by the placement of new structures or power lines because there are no known airports or landing strips within 5 miles of the RWD project site. Therefore there would be no operational impacts on traffic.

D.9.13 Overall Transportation and Traffic Impacts of Proposed Project

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Environmental Impacts and Mitigation Measures

Construction Impacts

Transportation and traffic impacts associated with construction of transmission lines, towers, access roads, and substations under Proposed Project, as well as Future Transmission System Expansion and Connected Actions and Indirect Effects, would be less than significant. This would be the result of Applicant Proposed Measures (APMs) being incorporated as part of the Proposed Project and mitigation measures being implemented for the Proposed Project, the Future Transmission System Expansion, and Connected Actions and Indirect Effects. Construction activities would temporarily affect traffic, parking, pedestrian and bicycle use, and public transportation routes in the vicinity of transmission lines. These impacts would be generated by movements of heavy equipment, trucks, and light trucks and automobiles. With incorporation of APMs T-2a, T-2b, T-4a, T-5a, T-6a, T-8a, T-9a, and T-10a, and Mitigation

Measures T-1a, T-1b, T-1c, T-2a, T-3a, T-4a, T-5a, T-6a, T-7a, T-9a, and T-10a and L-1b for the Proposed Project, as well as these mitigation measures for the Future Transmission System Expansion, and Connected Actions and Indirect Effects, construction-related transportation and traffic impacts would be less than significant (Class II).

One of the potentially most disruptive activities would be lane or road closures. However, Mitigation Measure T-1a (Restrict lane closures) would reduce any impacts to lane or road closures because work would be conducted in accordance with an approved plan, which would minimize impacts by limiting work to off-peak traffic hours where congestion is an issue.

Impacts to emergency service providers, bus transit services, and rail operations would be less than significant because the applicant would coordinate with the appropriate providers prior to construction. Construction could temporarily disrupt pedestrian and bicycle circulation during construction. Mitigation Measure T-4a (Ensure pedestrian and bicycle circulation and safety) would provide temporary pedestrian access, through detours or safe areas along construction zones.

Construction equipment and heavy trucks can cause damage to roads. Mitigation Measure T-5a (Repair damaged roads) would restore damaged roads to pre-construction conditions. With regard to parking, SDG&E will comply with local parking requirements, so parking impacts would be less than significant. However, Mitigation Measures T-7a (Notify public of potential short-term elimination of parking spaces) would ensure that parking effects remain less than significant. Overall, construction would not impact long-term regional traffic conditions, or affect any known transportation projects.

Operational Impacts

Once construction of the Proposed Project, the Future Transmission System Expansion, and Connected Actions and Indirect Effects is complete, access to and around transmission lines and towers and substations would be fully restored, and traffic impacts associated with the project would be greatly reduced. Only occasional maintenance would be required. This would be a less than significant impact (Class III), and no mitigation would be required.

Project operations would have a less than significant impact on traffic, circulation, and/or the level of service on Project roadways. Project operations would not cause emergency access restrictions, affect parking capacity, or increase roadway hazards. Additionally, the project air traffic patterns would not be affected by the placement of new structures or power lines. The project would not directly or indirectly conflict with adopted policies, plans or programs supporting alternative transportation.

Environmental Impacts and Mitigation Measures for Alternatives Along Proposed Project Route

This section provides a description of the existing transportation and traffic system and analyzes the transportation and traffic impacts related to the alternative transmission line routes and substations for the Sunrise Powerlink Project. Section D.9.14 describes the Imperial Valley Link Alternatives; Section D.9.15 describes the Anza-Borrego Link Alternatives; Section D.9.16 describes the Central Link Alternatives, Section D.9.17 describes the Inland Valley Alternatives and Section D.9.18 describes the Coastal Link Alternatives.

Table D.9-24 summarizes the impacts that have been identified for the alternatives along the Proposed Project route.

Table D.9-24. Impacts Identified – Alternatives – Transportation and Traffic

Impact No.	Description	Impact Significance
FTHL Eastern Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
SDG&E West of Dunaway Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class III
SDG&E West Main Canal–Huff Road Modification Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II

Table D.9-24. Impacts Identified – Alternatives – Transportation and Traffic

Impact No.	Description	Impact Significance
Partial Underground 230 kV ABDSP SR78 to S2 Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Overhead 500 kV ABDSP Within Existing ROW Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
Santa Ysabel Existing ROW Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
Santa Ysabel Partial Underground Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Santa Ysabel SR79 All Underground Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III

Table D.9-24. Impacts Identified – Alternatives – Transportation and Traffic

Impact No.	Description	Impact Significance
SDG&E Mesa Grande Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
CNF Existing 69 kV Route Alternative – No Impacts		
Oak Hollow Road Underground Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
San Vicente Road Transition Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Chuck Wagon Road Transition Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Pomerado Road to Miramar Area North		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III

Table D.9-24. Impacts Identified – Alternatives – Transportation and Traffic

Impact No.	Description	Impact Significance
Los Peñasquitos Canyon Preserve–Mercy Road Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Black Mountain to Park Village Road Underground Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class II
T-10	Underground construction could restrict access to properties and businesses.	Class III
Coastal Link System Upgrade Alternative		
T-1	Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow.	Class II
T-2	Construction would temporarily disrupt the operation of emergency service providers.	Class III
T-3	Construction would temporarily disrupt bus transit services.	Class III
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-6	Construction activities would cause a temporary disruption to rail traffic or operations.	Class III
T-7	Construction would result in the short-term elimination of parking spaces.	Class III
T-9	Construction would generate additional traffic on the regional and local roadways.	Class III
Top of the World Substation Alternative		
T-4	Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety.	Class II
T-5	Construction vehicles and equipment would cause physical damage to roads in the project area.	Class II
T-7	Construction would result in the short-term elimination of parking spaces.	Class III

D.9.14 Imperial Valley Link Alternatives Impacts and Mitigation Measures

There are three alternatives analyzed in the Imperial Valley Link, the FTHL Eastern Alternative, the SDG&E West of Dunaway Alternative, and the SDG&E West Main Canal–Huff Road Modification Alternative.

The regional transportation route in this area is Interstate 8 (I-8), which is under the jurisdiction of the California Department of Transportation (Caltrans). All of the other roadways are under the jurisdiction of Imperial County.

D.9.14.1 FTHL Eastern Alternative

This alternative was developed by the EIR/EIS team as a way to avoid almost 2 miles within the Flat-Tailed Horned Lizard (FTHL) Management Area. Instead the 500 kV overhead route would follow section lines within agricultural lands and would be approximately 1.5 miles shorter than the proposed route.

Environmental Setting

Under the SDG&E FTHL Eastern Alternative the transmission route would diverge from the Proposed Project route at MP 3 to travel north following section lines through agricultural lands to MP 8.75 where it would rejoin the Proposed Project route. The FTHL Eastern Alternative was developed to reduce impacts to BLM FTHL Management Area. Table D.9-25 lists the roads that would be impacted by the FTHL Eastern Alternative route.

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Table D.9-25. Public Roadways along the Alternative Route – FTHL Eastern Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
Interstate 8	Caltrans	Freeway	4	2005	15,000	FTHL-2.6	Overhead
County Highway S80	Imperial County	Collector	2	2002	1100	FTHL-3.9	Overhead
Local Roadways							
Vaughn Road	Imperial County	None	2	ND	—	FTHL-1.9	Overhead
Hardy Road	Imperial County	—	2	ND	—	FTHL-2	Overhead
Dixie Drain 4	Imperial County	—	—	—	—	FTHL-2.4	Overhead
Stevens Road	Imperial County	—	2	ND	—	FTHL-2.9	Overhead
Jefferey Road	Imperial County	—	2	ND	—	FTHL-0 to FTHL-6	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Construction Impacts

Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur with the FTHL Eastern Alternative, because there are no known planned transportation projects in the area. In addition, underground construction is not planned for the FTHL Eastern Alternative; therefore, no impacts would result from restricting access to properties from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

As described in Table D.9-25, this alternative would cross I-8, County Highway S80, and local roadways. Transmission stringing operations will require the roadways along this alternative to be temporarily shut down for unspecified periods of time. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detours plans for any long-term lane closure. Impacts to lane closure in the FTHL Eastern Alternative would be significant but mitigable to a level less than significant (Class II) with implementation of Mitigation Measure T-1a, which requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles. Roadway segments that would be most impacted would be two-lane roadways (e.g., Vaughn Road and Hardy Road), which provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce temporary disruptions of emergency service provider operations. Impacts to emergency service providers would be less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures (Class III)

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Imperial Valley Transit bus routes 400 and 450 intersect the alternative at I-8. Construction of the Proposed Project could cause schedule delays if I-8 needs to be shut down for some time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant (Class III) because alternative routes and bus stops would be planned avoiding impacts from construction zones. Therefore, additional mitigation measures are not required.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. Although, there are no known pedestrian or bicycle paths located adjacent to the alternative route; however, that does not mean that pedestrians or bicyclists would not move through the construction zone. As effects to public health and safety (pedestrian and bicycle) is a significant impact and SDG&E has not developed any Applicant Proposed Measures (APMs) that would protect the safety of pedestrians or bicyclists, Mitigation Measure T-4a would ensure that impacts are less than significant (Class II) because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition (Class II) by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Overhead construction activities would interfere with rail traffic if construction of overhead transmission lines required temporary closure of railroad ROWs. The FTHL Eastern Alternative segment would cross Union Pacific Railroad ROW south of County Highway S80. SDG&E has committed to implementing T-APM-8a as part of the Proposed Project, requiring SDG&E to obtain a permit to enter the railroad ROWs. By complying with the railroad company permit requirements, the impact of the FTHL Eastern Alternative on rail traffic operations would be less than significant (Class III) because the encroachment permit would require SDG&E to install temporary protection shields over the railroad as well as other protective measures. Therefore, no additional mitigation measures are required.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class II)

The area near the alternative is extremely isolated; however, construction activities would result in short-term elimination of a limited amount of parking spaces immediately adjacent to the construction ROW. SDG&E has committed to implementing T-APM-6b and will comply with County ordinances concerning parking which would require temporary replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies or similar measures (which is not expected). Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Proposed Project would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If this lowers the LOS it would be a significant impact (Class II). However, Mitigation Measure T-9a would ensure that significant impacts to levels of service on area roadways would be reduced to a less than significant impact by preparing a CTMP which would require SDG&E to coordinate with the affected city and/or county to plan alternative routes and determine acceptable off-peak hours for construction activities, among other measures to keep the LOS on affected roadways from decreasing further.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Project operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on FTHL Eastern Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Project operations for this short segment would be less than significant (Class III) because there would not be a substantial amount of trips generated by operation and maintenance of the FTHL Alternative.

Operational Impacts

The FTHL Eastern Alternative transmission line would need to be inspected and maintained. However, this would occur only occasionally and would require small crews. These activities would have a less than significant impact on traffic, circulation, and/or the level of service on nearby roadways (Class III). There would be no significant increase traffic on regional or local roadways nor would maintenance significantly add to disruption of traffic flow.

D.9.14.2 SDG&E West of Dunaway Alternative

This 6.1-mile alternative was suggested by SDG&E and approved by the proposed land use developer in the area. It would be an overhead 500 kV line, and would be 2.2 miles longer than the Proposed Project.

Environmental Setting

The SDG&E West of Dunaway Alternative route would diverge from the Proposed Project at MP 4 and would follow SWPL west for approximately 1.7 miles. At this point, the route would turn north paralleling Dunaway Road approximately 0.25 miles to the west, and would traverse BLM land to the Arizona and San Diego Railroad ROW. South of the railroad ROW, the SDG&E West of Dunaway Alternative would turn east paralleling the railroad tracks for 1.25 miles before turning briefly north to cross the tracks and Evan Hewes Highway (S80) and then northeast to rejoin the Proposed Project route at MP 7.9. The SDG&E West of Dunaway Alternative would avoid a major proposed land development project in the area.

This alternative would mainly traverse through public land. However, approximately 1.25 miles of the alternative would parallel private San Diego & Arizona Eastern Railroad parcel between WD-4 and WD-5.

Table D.9-26 lists the roads that would be impacted by the SDG&E West of Dunaway Alternative route.

Table D.9-26. Public Roadways along the Alternative Route – SDG&E West of Dunaway Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
Interstate 8	Caltrans	Freeway	4	2005	15,000	WD-2.6	Overhead
County Highway S80	Imperial County	Collector	2	2002	1100	WD-5	Overhead
Local Roadways							
Dunaway Road	Imperial County	Collector	2	2002	900	WD-4	Overhead
Reynolds Road	Imperial County	None	2	ND	—	WD-4	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur with the SDG&E West of Dunaway Alternative, because there are no known planned transportation project in the area. In addition, underground construction is not planned for the SDG&E West of Dunaway Alternative; therefore, no impacts would result from restricting access to properties from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

As described in Table D.9-26, this alternative would cross I-8, County Highway S80, and local roadways. Transmission stringing operations will require the roadways to be shut down for unspecified periods of time. At any single location, this impact would be short-term. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential long-term lane closure. However, to further ensure that road and lane closures do not cause a significantly impact Mitigation Measure T-1a is recommended. Impacts to lane closure in the SDG&E West of Dunaway Alternative would be significant but mitigable to a less than significant level (Class II) with implementation of Mitigation Measure T-1a, which requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles. Roadway segments that would be most impacted would be two-lane roadways (e.g., Dunaway Road and Reynolds Road), which provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service providers would be less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures and would be able to develop alternative routes (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Imperial Valley Transit bus routes 400 and 450 intersect this alternative at I-8. Construction of the SDG&E West of Dunaway Alternative could cause schedule delays if I-8 needs to be shut down for unspecified periods of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant (Class III) because alternative bus and transit routes and stops would be planned.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. Although, there are no known pedestrian or bicycle paths located adjacent to the alternative route that does not mean that pedestrians or bicyclists would not move through the construction zone. As effects to public health and safety (pedestrian and bicycle) is a significant impact and SDG&E has not developed any Applicant Proposed Measures (APMs) that would protect the safety of pedestrians or bicyclists, Mitigation Measure T-4a would ensure that impacts are less than significant (Class II) because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition (Class II) by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Overhead construction activities would interfere with rail traffic and operations if construction of overhead transmission lines requires closure of railroad ROW. This alternative segment would cross and run parallel to the Union Pacific Railroad ROW, south County Highway S80. SDG&E has committed to implementing T-APM-8a as part of the Proposed Project, requiring SDG&E to obtain a permit to enter the railroad ROWs. By complying with the railroad company permit requirements, the impact of the SDG&E West of Dunaway Alternative on rail traffic operations would be less than significant (Class III) because protective measure would be incorporated into the ROW permit. Therefore, no additional mitigation measures would be required.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during staging operations. However, the area near the SDG&E West of Dunaway Alternative is extremely isolated and parking should not be an issue during construction. Nonetheless, SDG&E has committed to implementing T-APM-6a as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III) because the public would be notified of any loss in parking spaces and where alternative spaces can be found prior to any construction work. No additional mitigation measures are required.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class III)

Construction of the SDG&E West of Dunaway Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If this reduces the LOS, it would be a significant impact (Class II). However, Mitigation Measure T-9a would ensure that significant impacts to levels of service on area roadways would be reduced to a less than significant impact by preparing a CTMP which would require SDG&E to coordinate with the affected city and/or county to plan alternative routes and determine acceptable off-peak hours for construction activities, among other measures to keep the LOS on affected roadways from decreasing further.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

Project operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on SDG&E West of Dunaway Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Operation and maintenance for this alternative segment would be less than significant (Class III).

D.9.14.3 SDG&E West Main Canal–Huff Road Modification Alternative

This 4.9-mile alternative would follow the IID Westside Main Canal to the east-northeast, and then turn north on Huff Road. Existing IID 92 kV transmission lines are located on the west side of Huff Road along most of this segment; however, where the IID line would turn northwest, this alternative would continue straight along Huff Road to reconnect with the Proposed Project 0.2 miles south of Wheeler Road (MP 15.9). The lengths of the alternative and the proposed routes would be essentially the same; however, this route would avoid direct effects to the Bullfrog Farms and also to the Raceway development.

Environmental Setting

The SDG&E West Main Canal–Huff Road Modification Alternative would diverge from the Proposed Project at MP 11 and follow the IID Westside Main Canal to the east-northeast, and then turn north on Huff Road. This alternative would avoid direct effects to the Bullfrog Farms and also to the Raceway development. The SDG&E West Main Canal–Huff Road Modification Alternative would primarily traverse through private agricultural lands. The only major roads this alternative crosses are Huff Road, Payne Road, and Wheeler Road. Table D.9-27 lists the roads that would be impacted by the SDG&E West Main Canal–Huff Road Modification Alternative route.

Table D.9-27. Public Roadways along the Alternative Route – SDG&E West Main Canal–Huff Road Modification

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
Local Roadways							
Huff Road	Imperial County	Collector	2	2002	1000	WMC-3	Overhead
Payne Road	Imperial County	None	2	ND	ND	WMC-3.3	Overhead
Wheeler Road	Imperial County	None	2	ND	ND	WMC-4.6	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

This SDG&E West Main Canal–Huff Road Modification Alternative would not disrupt any major bus transit services, cause any schedule delays, or require relocation of bus stops (Impact T-3) because there are no transit routes adjacent to this alternative. Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur with the SDG&E West Main Canal–Huff Road Modification Alternative, because there are no known planned transportation project in the area. In addition, underground construction is not planned for the SDG&E West Main Canal–Huff Road Modification Alternative; therefore, no impacts would result from restricting access to properties from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

As described in Table D.9-27, this alternative would cross local roadways (e.g., Huff Road, Payne Road) in the area. Transmission stringing operations may require the roadways to be temporarily shut down for unspecified periods of time. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detours plans for any long-term lane closure. Impacts to lane closure in SDG&E West Main Canal–Huff Road Modification Alternative would be significant but mitigable to a less than significant level (Class II) with implementation of Mitigation Measure T-1a, which requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked or lanes closed. Roadway segments that would be most impacted would be two-lane roadways (e.g., Huff Road and Payne Road), which provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service providers would be considered less than significant because emergency service providers would be aware of any delays, lane closures, and/or roadway closures and would develop alternative routes (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. Although, there are no known pedestrian or bicycle paths located adjacent to the alternative route; however, that does not mean that pedestrians or bicyclists would not move through the construction zone. As effects to public health and safety (pedestrian and bicycle) is a significant impact and SDG&E has not developed any Applicant Proposed Measures (APMs) that would protect the safety of pedestrians or bicyclists, Mitigation Measure T-4a would ensure that impacts are less than significant (Class II) because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to roads by vehicles and equipment would occur from construction vehicles (overhead line trucks, crew trucks, concrete trucks, etc.) that would be entering and leaving roads within the project area. This would be a significant impact (Class II). Construction traffic or equipment movement

would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Overhead construction activities would interfere with rail traffic and operations if construction of overhead transmission lines would require closure of railroad ROW. This alternative segment would cross Southern Pacific Railroad ROW south of S80. SDG&E has committed to implementing T-APM-8a as part of the Proposed Project, requiring SDG&E to obtain a permit to enter the railroad ROWs. By complying with the railroad company permit requirements, the impact of the SDG&E West Main Canal–Huff Road Modification Alternative on rail traffic and operations would be less than significant (Class III) because protective measures (e.g., temporary protection shields) would be incorporated into the ROW permit. Therefore, no additional mitigation measures would be required.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during construction activities. However, the area near the in SDG&E West Main Canal–Huff Road Modification Alternative is isolated and parking should not be an issue during construction. SDG&E has committed to implementing T-APM-6a as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III) because the public would be notified of any loss in parking spaces and where alternative spaces can be found prior to any construction work. No additional mitigation measures are required.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the SDG&E West Main Canal–Huff Road Modification Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If this were to lower the LOS, it would be a significant impact (Class II). However, Mitigation Measure T-9a would ensure that significant impacts to levels of service on area roadways would be reduced to a less than significant impact by preparing a CTMP which would require SDG&E to coordinate with the affected city and/or county to plan alternative routes and determine acceptable off-peak hours for construction activities, among other measures to keep the LOS on affected roadways from decreasing further. Although these impacts would be adverse it would be temporary and would not cause an increase that would be substantial in relation to the existing traffic load.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

SDG&E West Main Canal–Huff Road Modification Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on in SDG&E West Main Canal–Huff Road Modification Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the alternative would not be within 1,000 feet of any airport or airfield. In SDG&E West Main Canal–Huff Road Modification Alternative operations for this short segment would be less than significant (Class III).

D.9.15 Anza-Borrego Link Alternatives Impacts and Mitigation Measures

Two alternatives are considered in the Anza-Borrego Link: the Partial Underground 230 kV ABDSP SR78 to S2 Alternative (also considered with an All Underground Option) and the Overhead 500 kV ABDSP within Existing ROW Alternative.

This section describes the roadways that would be crossed or located adjacent to the alternative transmission line routes in the Anza-Borrego Link. The regional transportation route in this area is State Route 78, which is under the jurisdiction of Caltrans. All of the other roadways are under the jurisdiction of San Diego County.

D.9.15.1 Partial Underground 230 kV ABDSP SR78–S2 Alternative

This alternative was developed by the EIR/EIS team and would include installation of a double-circuit bundled 230 kV line (as opposed to an overhead 500 kV with the Proposed Project) that would be installed underground in SR78 from the San Felipe Substation through ABDSP, and then in northbound S2. A 1 mile segment adjacent to SR78 near S2 would be built overhead, as would approximately 8 miles of the alignment near S2, between where the line emerges from underground to the end of the alternative at MP SR-37.6. The proposed Central East Substation would not be constructed with this alternative and approximately 2 miles of transmission line (one mile of 500 kV and one mile of 230 kV) to and from that substation would be eliminated. Instead, a new 500 kV/230 kV substation would be constructed adjacent to the existing IID San Felipe Substation to accommodate the new transmission line.

There is also an All Underground Option considered for this alternative. Under this option, the length of the 230 kV transmission line between where the line enters ABDSP and it rejoins the Proposed Project near MP SR-37.6 would be installed underground within SR78 and S2.

Environmental Setting

The Partial Underground 230 kV ABDSP SR78–S2 Alternative includes expanding the IID San Felipe Substation to 500/230/12 kV and constructing underground 230 kV lines for most of the distance from the substation to near where S2 (San Felipe Road) intersects S22 (Montezuma Valley Road). From the substation, the transmission line route would continue underground within SR78 to one mile east of SR78/S2 intersection. At this point the transmission line would transition overhead to cross the Earthquake Valley Fault zone, requiring several towers within State-designated wilderness. The Partial Underground 230 kV ABDSP SR78–S2 Alternative would transition back to an underground transmission line at the SR78/S2 intersection, heading west within S2 for three miles. The Partial

Underground 230 kV ABDSP SR78–S2 Alternative transmission line would again transition to an overhead line along the east side of the highway at the second crossing of the Earthquake Valley Fault zone. From this point the transmission line would parallel Highway S2 cross country on the north side, to the Central East Substation vicinity, where it would rejoin the proposed route. The Partial Underground 230 kV ABDSP SR78–S2 Alternative would eliminate the need for the proposed Central East Substation.

The Partial Underground 230 kV ABDSP SR78–S2 Alternative crosses Split Mountain Road, SR78, and S2 as an underground transmission line. The Partial Underground 230 kV ABDSP SR78–S2 Alternative crosses or parallels S2 and San Felipe Way as an overhead transmission line. Table D.9-28 lists the roads that would be impacted by the Partial Underground 230 kV ABDSP SR78–S2 Alternative route.

Table D.9-28. Public Roadways along the Alternative Route – Partial Underground 230 kV ABDSP SR78–S2

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
State Route 78	Caltrans	Major Road	2	2005	6700	SR–3.8-25	Underground
County Highway 2	San Diego County	Rural LC	2	2003	3400	SR–26-28.5	Underground
County Highway 2	San Diego County	Rural LC	2	2003	3400	SR–28.5-37.5	Overhead
Local Roadways							
Split Mountain Road	San Diego County	Collector	2	ND	—	SR–1.2-3.8	Underground
6th Street	San Diego County	None	2	ND	—	SR–0.5	Underground
Kunkler Lane	San Diego County	None	2	ND	—	SR–3.1	Underground
Main Street	San Diego County	None	2	—	—	SR–0.5	Underground
1st, 2nd, 4th, and 5th Streets	San Diego County	None	2	ND	—	SR–0.1-0.4	Underground
Alvarado Street	San Diego County	None	2	ND	—	SR–1-3.8	Underground
San Felipe Way	San Diego County	None	2	—	—	SR–37.5	Overhead
Old Kane Springs Road	San Diego County	Rural LC	2	ND	—	SR–12	Underground
Borrego Valley Road	San Diego County	None	2	2003	1800	SR–10.7	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Partial Underground 230 kV ABDSP SR78–S2 Alternative because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur within the Partial Underground 230 kV ABDSP SR78–S2 Alternative. Currently, there are no known transportation projects within the Partial Underground 230 kV ABDSP SR78–S2 Alternative.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Under this alternative, two 230 kV circuits would be constructed underground along SR78 and S2. This alternative would require two separate trenches for the 230 kV circuits along SR78. As a result, residents, State Park officials, and members of the public would experience significant traffic delays along SR78 and S2. It is assumed that it would take almost twice the time to construct this alternative underground as projected for the Proposed Project. Construction could take as long as 60 to 80 days to complete the underground segments along SR78 and S2.

SDG&E has committed to T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to acquire permits and develop detour plans to reduce traffic congestions. Similar to the Proposed Project, implementation of Mitigation Measure T-1a would ensure that significant impacts associated with temporary road or lane closures would be reduced to a less than significant level. Mitigation Measure T-1a would restrict all necessary lane closures on major roadways to off-peak periods.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity required for the Partial Underground 230 kV ABDSP SR78–S2 Alternative would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways were blocked; lanes restricted or access residences and/or businesses denied. Roadway segments that would be most impacted would be two-lane roadways (e.g., Split Mountain Road and Old Kane Springs Road), which provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce temporary disruptions of emergency service provider operations. Impacts to emergency service providers would be considered less than significant because emergency service providers would be aware of any delays, lane closures, and/or roadway closures (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System 891 and 893 intersects this alternative at SR78 and S3. Construction of the Partial Underground 230 kV ABDSP SR78–S2 Alternative would cause schedule delays if SR78 needs to be shut down for some time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant (Class III) because alternative bus and transit routes and stops would be planned.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. Although, there are no known pedestrian or bicycle paths located adjacent to the alternative route; however, it is probable that pedestrians or bicyclists would use the road and therefore would move through the construction zone. This would be a significant impact (Class II). As effects to public health and safety (pedestrian and bicycle) is a significant impact and SDG&E has not developed any Applicant Proposed Measures (APMs) that would protect the safety of pedestrians or bicyclists, Mitigation Measure T-4a would ensure that impacts are less than significant because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to highways and local roadways by construction vehicles and equipment (line trucks, crew trucks, concrete trucks, etc.) along this alternative segment would occur by vehicles entering and leaving roadways (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition by requiring physical roadway improvements to areas that are noticeably damaged.

The expansion of the IID San Felipe Substation would cause noticeable physical damage to roadways by construction vehicles and equipment entering and leaving roadways (Class II). Noticeable deterioration of roadway surfaces or other features from construction activities would be significant but mitigable to a level less than significant with implementation of Mitigation Measure T-5a because roadways would be repaired to pre-construction conditions.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during construction activities. However, the area near the alternative is rural and isolated so parking should not be an issue during construction. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III) because the public would be notified of any loss in parking spaces and where alternative spaces can be found prior to any construction work. No additional mitigation measures are required.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Partial Underground 230 kV ABDSP SR78–S2 Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. These additional trips would be temporary and would not cause an increase that would be substantial in relation to the existing traffic loads (Class II). Although these impacts would be adverse it would be temporary and would not cause an increase that would be substantial in relation to the existing traffic load with the implementation of Mitigation Measure T-9a because detours will be established where delays are long-term.

Mitigation Measures for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along this alternative could restrict access of residents, State Park officials, and members of the public to private properties or areas within the Anza Borrego Desert State Park. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or areas of the State Park. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Partial Underground 230 kV ABDSP SR78–S2 Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on Partial Underground 230 kV ABDSP SR78–S2 Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the alternative would not be within 1,000 feet of any airport or airfield. Partial Underground 230 kV ABDSP SR78–S2 Alternative operations for this segment would be less than significant (Class III).

San Felipe Substation

The Partial Underground 230 kV ABDSP SR78–S2 Alternative would also require construction of a major 230/500 kV substation adjacent to the existing IID San Felipe Substation. Expansion of the IID San Felipe Substation would temporarily increase traffic on the regional and local roadways through construction worker commute trips (trip generation) and substation equipment deliveries. Although these impacts would be adverse it would be temporary and would not cause an increase that would be substantial in relation to the existing traffic. Impacts to transportation and traffic during construction and operations would be similar to those described above for the transmission line itself. The same APMs and mitigation measures would apply to the substation as to the transmission line.

All Underground Option

In the All Underground Option, those two parts of the Partial Underground 230 kV SR78 to S2 Alternative that would be on overhead structures are put underground. Specifically, overhead segments from

MP SR-25 to MP SR-26, and from MP SR 29 to near MP SR-37.4 would be replaced by corresponding underground segments. These underground segments would be build within SR78 and SR2, rather than cross country, as would occur under the alternative. A transition tower structure would be required near MP SR 37.4 to bring the line overhead once again.

Impacts during construction and operations would be similar to those described above for the underground segments of the Partial Underground 230 kV SR78 to S2 Alternative. Nearly the same transportation and traffic impacts would occur under the option as would occur if the alternative were constructed. The difference would be that extending the amount of underground construction in roadways would increase the length of time lane controls would be required. However, the same APMS and mitigation measures would apply to the option as to the as to the alternative itself, ensuring the impacts remain less than significant.

D.9.15.2 Overhead 500 kV ABDSP within Existing ROW Alternative

The alternative would differ from the proposed route in the Grapevine Canyon area (in the Angelina Springs Cultural District), in the vicinity of Tamarisk Grove Campground, and in a few areas east of Tamarisk Grove Campground along SR78. The alternative would remain within the existing SDG&E 69 kV ROW/easement. This alternative would eliminate towers within State-designated Wilderness. Undergrounding of the existing 69 kV and 92 kV lines would not occur with this alternative; those lines would be underbuilt on Delta lattice towers.

The *East of Tamarisk Grove Campground 150-Foot Option* was suggested by SDG&E in which the alternative would follow the Proposed Project route in the 150-foot proposed alignment, and not the existing ROW, between the eastern Park boundary (MP 60.9) to Tamarisk Grove Campground (MP 74.8) near the SR78/Highway S3 intersection. Similar to the Proposed Project described in Section B.2.2, SDG&E would underbuild and underground the existing 92 kV and 69 kV lines.

Environmental Setting

The Overhead 500 kV ABDSP within Existing ROW Alternative would require construction of an unspecified number of additional towers in order to follow the 69 kV existing ROW. The Overhead 500 kV ABDSP within Existing ROW Alternative would primarily follow the 69 kV existing ROW with the exception of a 150-foot alignment that would follow the Proposed Project east of Tamarisk Grove Campground. This alternative would not require a State Park Plan Amendment and would not result in direct effects to State-designated wilderness.

The Overhead 500 kV ABDSP within Existing ROW Alternative would cross SR78, County Highway S3, and Grapevine Canyon Road. Table D.9-29 lists the roads that would be impacted by the Overhead 500 kV ABDSP within Existing ROW Alternative route.

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Table D.9-29. Public Roadways along the Alternative Route – Overhead 500 kV ABDSP within Existing ROW

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
State Route 78	Caltrans	Major Road	2	2005	6700	—	Overhead
Yaqui Pass Road S3	San Diego County	Collector	2	2003	1000	—	Overhead
Local Roadways							
Old Kane Springs Road	San Diego County	None	2	ND	—	—	Overhead
Grapevine Canyon Road	San Diego County	None	2	ND	—	—	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Overhead 500 kV ABDSP within Existing ROW Alternative because there are no rail operations along this alternative. Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur with the Overhead 500 kV ABDSP within Existing ROW Alternative, because there are no known planned transportation project in the area. In addition, underground construction is not planned for the Overhead 500 kV ABDSP within Existing ROW Alternative; therefore, no impacts would result from restricting access to properties from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

As described in Table D.9-29, this alternative would cross SR78, County Highway S3, and local roadways. Transmission stringing operations may require the roadways to be temporarily shut down for short periods of time. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detours plans for any long-term lane closure. Impacts to lane closure in Overhead 500 kV ABDSP within Existing ROW Alternative would be significant (Class II) but mitigable to a level less than significant with implementation of Mitigation Measure T-1a. This measure requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activities would interfere with emergency response by ambulance, fire, paramedic and police vehicles if lanes are blocked or roadways are restricted. Roadway segments that would be most impacted would be two-lane roadways (e.g., Grapevine Canyon Road and Old Kane Springs Road), which provide one lane travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project. Implementation of T-APM-4a would ensure that operation of emergency service pro-

viders is not affected by making emergency service providers aware of any potential delays, lane closures, and/or roadway closures and maintain their effectiveness. By notifying emergency service providers of the construction location and activities prior to construction, alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times. Impacts would be less than significant (Class III), and no mitigation measures are required because alternative routes would be developed so that there would be no impact to emergency service effectiveness.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System routes 891 and 893 intersect the Overhead 500 kV ABDSP within Existing ROW Alternative at SR78 and S3. Construction of the Overhead 500 kV ABDSP within Existing ROW Alternative would cause schedule delays if SR78 or S3 needs to be shut down for an unspecified time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities; therefore, impacts to bus transit services are considered less than significant (Class III) because alternative bus and transit routes and stops would be planned.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line construction activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. Although, there are no known pedestrian or bicycle paths located adjacent to the alternative route; however, that does not mean that pedestrians or bicyclists would not move through the construction zone. As effects to public health and safety (pedestrian and bicycle) is a significant impact (Class II) and SDG&E has not developed any Applicant Proposed Measures (APMs) that would protect the safety of pedestrians or bicyclists, Mitigation Measure T-4a would ensure that impacts are less than significant because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area (Class II)

Unexpected damage to highways and local roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along this alternative segment would occur by vehicles entering and leaving roadways (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction activities. However, the area near the alternative is rural and isolated so parking is not expected to be an issue during construction. SDG&E has committed to implementing T-APM-6b and will comply with San Diego County ordinances concerning parking which would require temporary replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies or similar measures. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Overhead 500 kV ABDSP within Existing ROW Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If this lowers the LOS, it would be a significant impact (Class II). Although these impacts would be temporary and would not cause a permanent increase in relation to the existing traffic load, with implementation of Mitigation Measure T-9a detours and other traffic management strategies will be established to make impacts less than significant.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

Overhead 500 kV ABDSP within Existing ROW Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, increase road hazards and/or the level of service on roadways within the Overhead 500 kV ABDSP within Existing ROW. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Impacts associated with operation and maintenance are adverse, but less than significant (Class III).

East of Tamarisk Grove Campground 150-Foot Option

Under East of Tamarisk Grove Campground 150-Foot Option, the first part of the Overhead 500 kV ABDSP within Existing ROW Alternative would follow the Proposed Project route rather than the

existing ROW from the eastern Park boundary (MP 60.9) to Tamarisk Grove Campground (MP 74.8). From Tamarisk Grove Campground, the alternative would continue to the northwest, as stated in the alternative. The impacts to transportation and traffic would be the same under both the alternative and the option. APMs and mitigation measures for the option would be the same as for the Proposed Project.

D.9.16 Central Link Alternatives Impacts and Mitigation Measures

Four Central Link Alternatives are considered in this section: the Santa Ysabel Existing ROW Alternative, the Santa Ysabel Partial Underground Alternative, the Santa Ysabel SR79 All Underground Alternative, and the Mesa Grande Alternative.

This section describes the roadways that would be crossed or located adjacent to the alternative transmission line routes in the Central Link. The regional transportation route in this area is SR78 and SR79, which is under the jurisdiction of the California Department of Transportation (Caltrans). All of the other roadways are under the jurisdiction of San Diego County.

D.9.16.1 Santa Ysabel Existing ROW Alternative

This alternative would follow an existing 69 kV transmission line ROW on the west side of SR79 in the northern half and east of SR79, along the toe of the hill slope in the southern portion of the alternative. This route would pass east of the existing Santa Ysabel Substation and continue to follow the existing 69 kV line south of SR78 until it rejoins the proposed corridor.

Environmental Setting

The Santa Ysabel Existing ROW Alternative overhead route would follow an existing transmission line ROW along the west, and then east, side of SR79. The 230 kV transmission line would be located along a 9-mile stretch of the Santa Ysabel Valley east of the Proposed Project. This alternative would cross SR78 and SR79. In comparison, the Proposed Project would cross Mesa Grande Road and SR78. This alternative would reduce the risk of fire in comparison to the Proposed Project.

Table D.9-30 lists the roads that potentially could be impacted by the Santa Ysabel Existing ROW Alternative route.

Table D.9-30. Public Roadways along the Alternative Route – Santa Ysabel Existing ROW Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
State Route 79	Caltrans	Collector	2	2005	3000	SYR-4, SYR-7.2	Overhead
Julian Road (SR78)	Caltrans	Collector	2	2005	6600	SYR-7.2	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

There are no rail operations in the Santa Ysabel Existing ROW Alternative area; therefore, no rail traffic or operation impacts (Impact T-6) would occur. Construction impacts related to the conflict with planned transportation projects (Impact T-8) would not occur with the Santa Ysabel Existing ROW Alternative, because there are no known planned transportation projects in the area. Additionally, underground construction is not planned for the Santa Ysabel Existing ROW Alternative; therefore, there would be no impacts from restricting access to properties from underground construction (Impact T-10).

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Santa Ysabel Existing ROW Alternative would cross SR78 and SR79 potentially causing temporary road and lane closures that would disrupt traffic flow due to transmission line stringing operations. Implementation of T-APM-2a and T-APM-2b would reduce impacts because permits would be acquired and detour plans submitted, which would include alternative routes where motorists could not move through the construction zone efficiently. However, during periods of increased traffic, the impact of road and lane closures could be significant (Class II). However, mitigation measures have been developed to ensure that significant impacts associated with temporary road and lane closures would not further disrupt traffic flow. Therefore, with implementation of Mitigation Measure T-1a impacts would be reduced to less than significant levels because the roadway LOS would not be decreased and alternative routes would be planned where necessary. Mitigation Measure T-1a would restrict all necessary lane closures on roadways to off-peak and periods reducing the impacts of temporary road and lane closures.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked or lanes are closed. Potential roadway segments that would be most impacted would be SR78 and SR79 which are two-lane roadways that provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project which would require SDG&E to notify emergency service providers of the construction location and activities prior to construction so that alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times. Therefore, no mitigation measures required because alternative routes would have been developed eliminating impacts to emergency service providers.

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System routes 891 and 892 intersect this alternative at SR78 and SR79. Construction of the Santa Ysabel Existing ROW Alternative would cause schedule delays if SR78 or SR79 needs

to be shut down for an unspecified length of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities; therefore, impacts to bus transit services are considered less than significant (Class III). By prior notification, the transit and bus service providers will have sufficient amount of time to designate alternative bus stops and plan alternative routes, avoiding the construction zone. Therefore, no mitigation measures would be required because impact would be eliminated by the alternative routes and stops.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by transmission line stringing activities if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle routes were blocked. This would be a significant impact (Class II). In order to avoid significant impacts to pedestrians and bicycle movements alternative pedestrian and bicycle routes would need to be established around the construction zone for safe passage as well as temporary detours for trail users for pedestrian and bicycles within the Santa Ysabel Existing ROW Alternative. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage as well as temporary detours for pedestrian and bicycles within the Santa Ysabel Existing ROW Alternative route.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to highways and local roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along this alternative segment would occur by vehicles entering and leaving roadways. This would be a significant impact (Class II). Construction traffic or equipment movement would be considered a significant impact if there were an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure T-5a would ensure that damaged roadways are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during construction activities. However, the area near the alternative is rural and isolated so parking is not expected to be an issue

during construction. SDG&E has committed to implementing T-APM-6b and will comply with San Diego County ordinances concerning parking which would require temporary replacement of parking spaces if loss of parking spaces would create a hardship as determined by the affected public agencies or similar measures. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Santa Ysabel Existing ROW Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If the LOS were to be reduced, this would be a significant impact (Class II).

Although these impacts would be adverse it would be temporary and would not cause an increase that would be substantial in relation to the existing traffic load with the implementation of Mitigation Measure T-9a because detours will be established where delays are long-term.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

Project operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, affect parking capacity, increase road hazards and/or the level of service on Santa Ysabel Existing ROW Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Santa Ysabel Existing ROW Alternative operations and maintenance for this alternative would be less than significant (Class III).

D.9.16.2 Santa Ysabel Partial Underground Alternative

This 230 kV alternative would begin at MP 105.5 where the proposed route would join Mesa Grande Road at the base of the hills at the western side of the Santa Ysabel Valley. The alternative would transition underground at the southern side of Mesa Grande Road and would travel underground in Mesa Grande Road, SR79 and then, south of SR78, following property lines for approximately one mile to rejoin the proposed route at approximately MP 109.5 where it would transition overhead. The route would be 0.7 miles longer than the proposed route.

Environmental Setting

At the base of the hill along Mesa Grande Road, the Santa Ysabel Partial Underground Alternative would transition into an underground transmission line (MP 105.3) in Mesa Grande Road to SR79 where it would turn east to SR78 and connect back into the Proposed Project at MP 109.2. The Santa Ysabel Partial Underground Alternative would be located in portions of SR79 and cross Mesa Grande Road and SR78. This alternative would allow for use of an existing transmission corridor and the underground segment would reduce fire risk in comparison to the Proposed Project. Table D.9-31 lists the roads that potentially could be impacted by the Santa Ysabel Partial Underground Alternative route.

Table D.9-31. Public Roadways along the Alternative Route – Santa Ysabel Partial Underground Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
State Route 79	Caltrans	Collector	2	2005	3000	SYR-4 & 7.2	Underground
State Route 78	Caltrans	Collector	2	2005	1400		Underground
Local Roadways							
Mesa Grande Road	San Diego County	None	2	ND	—	MG-1.9	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Santa Ysabel Partial Underground Alternative route because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Santa Ysabel Partial Underground Alternative would be constructed underground and would cause temporary road and lane closures which would disrupt traffic flow during trenching and other construction activities. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any long-term lane closures. Although, impacts to lane closures along the Santa Ysabel Partial Underground Alternative would be temporary, the underground transmission line construction would be significant (Class II) but mitigable to a less than significant level with Mitigation Measure T-1a (Class II). To ensure that roadways and highways are not unnecessarily impacted during construction, Mitigation Measure T-1a is recommended. Therefore, with implementation of Mitigation Measure T-1a, impacts would be reduced

to less than significant levels because the roadway LOS would not be decreased and alternative routes would be planned where necessary. Mitigation Measure T-1a would restrict all necessary lane closures on roadways to off-peak periods reducing the impacts of temporary road and lane closures

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Underground construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed, or access to residences and business are denied. Potential roadway segments that would be most impacted would be two-lane roadways (e.g., Mesa Grande Road) that provide one lane of travel per direction. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations could be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System routes 891 and 892 intersect this alternative at SR78 and SR79. Construction of the Santa Ysabel Partial Underground Alternative would cause schedule delays if SR78 and/or SR79 needs to be shut down for prolonged length of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant (Class III). By prior notification, the transit and bus service providers will have sufficient amount of time to designate alternative bus stops and plan alternative routes, avoiding the construction zone. Therefore, no mitigation measures would be required because impact would be eliminated by the alternative routes and stops.

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by underground construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked; however, there are no pedestrian and/or bicycle routes along this alternative. Nevertheless, that doesn't mean that pedestrians or bicyclists would not move through the construction zone. This would be a significant impact (Class II). Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage as well as temporary detours for pedestrian and bicycles within the Alternative route.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to roadways by construction vehicles and equipment (overhead line trucks, crew trucks, concrete trucks, etc.) along this alternative segment would occur by vehicles entering and leaving roadways and underground construction of the transmission lines. This would be a significant impact (Class II). Construction traffic or equipment movement would be considered a significant impact if there were an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure T-5a would ensure that damaged roadways are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Short-term elimination of parking spaces during construction activities would occur along the Santa Ysabel Partial Underground Alternative. However, the area near the alternative is rural and parking should not be an issue during construction. Nevertheless, SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III). Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Santa Ysabel Partial Underground Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. If this traffic were to lower the LOS, this would be a significant impact (Class II).

Although these impacts would be temporary and would not cause a permanent increase in traffic, they would be substantial in relation to the existing traffic load. With the implementation of Mitigation Measure T-9a they would be less than significant.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Under this alternative, two 230 kV circuit would be constructed underground. This alternative would require two separate trenches for the 230 kV circuits along SR78, SR79, and Mesa Grande Road. Underground construction along SR78 and SR79 as well as Mesa Grande Road could restrict access to recreational areas, reservations and/or private properties and businesses by residents, park officials, and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or areas of the State Park. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Santa Ysabel Partial Underground Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, affect parking capacity, increase road hazards and/or the level of service on the Santa Ysabel Partial Underground Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Santa Ysabel Partial Underground Alternative operations for this segment would be less than significant (Class III).

D.9.16.3 Santa Ysabel SR79 All Underground Alternative

This alternative would diverge from the Proposed Project at MP 100, just south of the crossing of SR78. It would start as an overhead 230 kV line, which would then transition to an underground route on private property, west of SR79. It would be underground along existing dirt roads and within hay fields and SR79 through the Santa Ysabel Valley, rejoining the proposed route south of SR78.

Environmental Setting

The 8.9-mile alternative route would diverge from the proposed route at MP 100 and would follow the existing 69 kV ROW overhead for approximately 2,000 feet south until the line would be west of the Alquist-Priolo Fault Zone. The line would transition underground and would travel south for approximately 4.5 miles in hay fields that parallel SR79, but are 400 to 1,500 feet to the west of the highway and fault zone and east of the existing 69 kV ROW. The Santa Ysabel All Underground Alternative would cross a drainage area that would require a horizontal directional drill. To the extent feasible, vaults would be located to line up with fence lines in the field to minimize interference with plowing operations. The alternative route would enter SR79 south of Elsinore Fault Alquist-Priolo Fault Zone crossing. South of Santa Ysabel and SR78 the line would follow property line to minimize land use impacts. The Santa Ysabel SR79 All Underground Alternative would rejoin the Proposed Project at MP 109.5 where it would transition to an overhead transmission line. The only major road that the Santa Ysabel SR79 Underground Alternative crosses is SR79.

Table D.9-32 lists the roads that potentially could be impacted by the Santa Ysabel SR79 All Underground Alternative route.

Table D.9-32. Public Roadways along the Alternative Route – Santa Ysabel SR79 All Underground Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
State Route 79	Caltrans	Collector	2	2005	3000	SYAU-0	Underground
Local Roadways							
Unnamed Street	San Diego County	—	—	—	—	SYAU-3.3	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur within the Santa Ysabel SR79 All Underground Alternative route because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

This alternative would cause temporary road and lane closures which would disrupt traffic flow during overhead stringing and underground construction. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential long-term lane closures. Impacts to lane closures in the Santa Ysabel SR79 All Underground Alternative area would be significant (Class II) but mitigable to a level less than significant with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed, or access to residences and business are restricted.

Potential roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction (e.g., SR79). SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System route 892 intersects this alternative at SR79. Construction of the Santa Ysabel SR79 All Underground Alternative would cause schedule delays if SR79 needs to be shut down for an unspecified length of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities; therefore, impacts to bus transit services are considered less than significant because alternative routes and bus stops would be developed as necessary (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by underground construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. Although there are no known pedestrian or bicycle routes along this alternative, it is likely that pedestrians and bicyclists would move through the construction zone because this is the only through road. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to a less than significant level because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to roadways by construction vehicles, underground construction and construction equipment along the Santa Ysabel SR79 All Underground Alternative would impact SR79. Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW (Class II). SDG&E has not suggested any APMs for damaged roads; therefore, Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T 5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Short-term elimination of parking spaces during underground construction would occur along the Santa Ysabel SR79 All Underground Alternative route. However, the area near the alternative is not an urban area and parking should not be an issue during construction. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III). Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Santa Ysabel SR79 All Underground Alternative would temporarily increase traffic on regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials. Lane closures and other traffic control would be required. This would be a significant impact (Class II). This impact would be significant in relation to the existing traffic movement. To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along SR79 could restrict access to recreational areas, reservations and/or private properties and businesses by residents, State Park officials, and members of the public. For this reason SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Santa Ysabel SR79 All Underground Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on Santa Ysabel SR79 All Underground Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Santa Ysabel SR79 All Underground Alternative operations and maintenance activities would be less than significant (Class III).

D.9.16.4 SDG&E Mesa Grande Alternative

This alternative to a one-mile portion of the proposed overhead 230 kV route was proposed by the landowner and also by SDG&E in order to reduce the visibility of the overhead line west of Mesa Grande Road. It would diverge from the proposed route at MP 102.2, and rejoin it before MP 104.

Environmental Setting

The SDG&E Mesa Grande Alternative would diverge from the proposed route at MP 102.2 and would turn southwest along the lower portion of the northwesterly facing slope of Small Valley running from the northeast to the southwest to cut the angle and rejoin the Proposed Project at MP 103.5, on the southerly side of Mesa Grande Road. This alternative would reduce visual resources impacts, there would be fewer access roads required, and the landowner prefers this alternative route. The only road that this alternative crosses is Mesa Grande Road.

Table D.9-33 lists the roads that potentially could be impacted by the SDG&E Mesa Grande Alternative route.

Table D.9-33. Public Roadways along the Alternative Route – SDG&E Mesa Grande Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
None							
Local Roadways							
Mesa Grande Road	San Diego County	None	2	ND	—	MG-1.9	Overhead

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

There is no transit service along this alternative; therefore, there would be no construction-related impacts to transit service (Impact T-3). Construction impacts related to the disruption of rail traffic or

operations (Impact T-6) would not occur within the SDG&E Mesa Grande Alternative route because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area. The SDG&E Mesa Grande Alternative would not require underground construction; therefore restricted access to properties and businesses from underground construction (Impact T-10) would not occur.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The SDG&E Mesa Grande Alternative would be constructed overhead crossing Mesa Grande Road. This alternative would potentially cause temporary road and lane closures which would disrupt traffic flow during overhead stringing across Mesa Grande Road. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential long-term lane closures. Impacts to lane closures in the SDG&E Mesa Grande Alternative area would be significant (class II) but mitigable to a level less than significant with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays. Lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity could interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked or lanes are closed. Potential roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction (Mesa Grande Road). SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. Although there are no known pedestrian or bicycle routes along this alternative, because of the limited number of roads, pedestrians and bicyclists would move through the construction zone. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant because alternative pedestrian and bicycle routes would be established around the construction zone.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

There is a potential for unexpected damage to roadways by construction vehicles and equipment along the SDG&E Mesa Grande Alternative segment. Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. This would be a significant impact (Class II). SDG&E has not suggested any APMs for damaged roads; therefore, Mitigation Measure T-5a is recommended to ensure that the roadways would be repaired and properly restored to the original condition. Implementation of Mitigation Measure T-5a would ensure that damaged roadways in the Proposed Project area are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment could have on roads to less than significant levels by requiring roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction activities. However, the area near the alternative is isolated and parking should not be an issue during construction. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant (Class III). Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of SDG&E Mesa Grande Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure

that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

SDG&E Mesa Grande Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on the SDG&E Mesa Grande Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. SDG&E Mesa Grande Alternative operation and maintenance for this segment would be less than significant (Class III).

D.9.17 Inland Valley Link Alternatives Impacts and Mitigation Measures

Four alternatives are considered within the Inland Valley Link: the CNF Existing 69 kV Route Alternative, the Oak Hollow Road Underground Alternative, the San Vicente Road Transition Station Alternative, and the Chuck Wagon Road Alternative.

This section describes the potential roadways that would be crossed or located adjacent to the alternative transmission line routes and substation in the Imperial Valley Link. The regional transportation route in this area is SR78, which is under the jurisdiction of the California Department of Transportation (Caltrans); however, none of the alternatives in this link cross SR78. All of the other roadways are under the jurisdiction of San Diego County.

D.9.17.1 CNF Existing 69 kV Route Alternative

This 0.5-mile alternative segment would start at MP 111.3 where the proposed 230 kV and existing 69 kV transmission lines would be routed west for 0.5 miles and then south for approximately 0.5 miles to avoid Cleveland National Forest (CNF). The alternative would remain in the existing 69 kV ROW heading southwest through Cleveland National Forest to rejoin the proposed route at MP 111.8. This alternative would be 0.5 miles shorter than the Proposed Project and the existing 69 kV transmission line would not need to be relocated out of the existing ROW.

Environmental Setting

The CNF Existing 69 kV Route Alternative would traverse southwesterly through the Cleveland National Forest in the existing 69 kV ROW for approximately 0.5 miles at approximately MP 111.3 to MP 112.1. The CNF Existing 69 kV Route Alternative may require an amendment of the Forest Plan; however, this alternative would be shorter and less visible to nearby residences, no new access roads would be required, and relocation of the existing 69 kV transmission line would not be required. There are no known roads, transportation plans or air space that would be impacted by the CNF Existing 69 kV

Route Alternative. As such, construction or operation-related impacts to traffic and transportation would not occur

Environmental Impacts and Mitigation Measures

There would be no known construction or operation impacts by the CNF Existing 69 kV Route Alternative. No mitigation measures would be required.

D.9.17.2 Oak Hollow Road Underground Alternative

The purpose of this alternative would be to extend the proposed underground to the east of Mount Gower County Open Space Preserve so the line would be underground through the valley area. The alternative would require 0.6 miles of additional underground 230 kV transmission line, and the existing 69 kV would remain overhead.

Environmental Setting

The Oak Hollow Road Underground Alternative would transition underground at approximately MP 116.7 (around proposed Tower I93) within Mt. Gower Open Space Preserve on a hill approximately 100 feet north of an existing dirt access road (following the route of a spur road proposed by SDG&E). Then the Oak Hollow Road Underground Alternative would travel underground in the dirt road for approximately 1,400 feet before passing between a residence and a fenced pasture to join the residence's paved driveway at its intersection with Oak Hollow Road. The route would turn west and would travel underground in the paved Oak Hollow Road for approximately 1,300 feet. When Oak Hollow Road turns into a dirt road just west of the most western driveway in the Starling Mountain Estates Owners (SMEO) area, the line would continue west-southwest in a maintained dirt and gravel access road to exit SMEO private property traveling under a fenced gate into Mt. Gower Open Space Preserve for approximately 600 feet to Structure I125. This road is also part of Oak Hollow Road before it transitions to Gunn Stage Road at the other end of the park. This alternative would rejoin the underground segment of the Proposed Project at MP 117.3 along Gunn Stage Road. The Oak Hollow Road Underground Alternative would require an additional 0.6 miles of underground transmission line. The major roads this alternative crosses underground are Oak Hollow Road and Gunn Stage Road.

Table D.9-34 lists the roads that potentially could be impacted by the Oak Hollow Road Underground Alternative route.

Table D.9-34. Public Roadways along the Alternative Route – Oak Hollow Road Underground

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
None							
Local Roadways							
Oak Hollow Road	San Diego County	N/A	2	—	—	—	Underground
Gunn Stage Road	San Diego County	N/A	2-4	2006	4,790	—	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

There are no transit services near the Oak Hollow Road Underground Alternative route; therefore, no impacts to transit service would occur (Impact T-3). Oak Hollow Road Underground Alternative construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Oak Hollow Road Underground Alternative would be constructed underground crossing Oak Hollow Road and Gunn Stage Road. This alternative would potentially cause temporary road and lane closures which would disrupt traffic flow during underground construction activities along the Oak Hollow Road Underground Alternative route. Impacts to lane closures in the SDG&E Mesa Grande Alternative area would be significant (Class II) but mitigable to a less than significant level with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays. Road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity could interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are restricted or access to residences and businesses are denied. Potential roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction (e.g., Oak Hollow Road and Gunn Stage Road). SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked (Class II). Although there are no known bicycle paths that are located adjacent to the alternative route, pedestrians or bicyclists may still seek to move through the construction zone. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts are less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant level because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to roadways by construction vehicles and equipment (line trucks, crew trucks, concrete trucks, etc.) along this alternative segment roadway damage would occur by vehicles entering and leaving roadways and underground construction of the transmission lines. This would be a significant impact (Class II). Construction traffic or equipment movement would be considered a significant impact if there were an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any APMs for damaged roads. Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition. Implementation of Mitigation Measure T-5a would ensure that damaged roadways are restored to previous conditions and/or improved conditions. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction. However, the area near the alternative is rural and parking should not be an issue during construction. Nevertheless, SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Oak Hollow Road Underground Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along Oak Hollow Road and Gunn Stage Road could restrict access to private properties and businesses by residents and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Oak Hollow Road Underground Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on the Oak Hollow Road Underground Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Oak Hollow Road Underground Alternative operations for this segment would be less than significant (Class III).

D.9.17.3 San Vicente Road Transition Alternative

The alternative would move the transition structure from its proposed location along San Vicente Road (MP 121.9) approximately 0.3 miles west to MP 122.2. The underground line would follow San Vicente Road within a 60-foot ROW for an additional 2,100 feet and would cross under an existing Creelman-Los Coches 69 kV transmission line, before it would turn north and would travel through open space for approximately 200 feet to the overhead transition point.

Environmental Setting

The San Vicente Road Transition Alternative would extend the underground segment in the San Vicente Road approximately 2.3 miles farther west and then continue west underground in SDG&E 69 kV ROW for 1.0 mile to MP 124.3 where it would transition overhead and turn south along the Proposed Project route. This alternative would minimize visibility of the transition from San Vicente Road and reduce land use disturbance. The only road the San Vicente Road Transition Alternative would impact is the San Vicente Road.

Table D.9-35 lists the roads that potentially could be impacted by the San Vicente Road Transition Alternative route.

Table D.9-35. Public Roadways along the Alternative Route – San Vicente Transition Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
None							
Local Roadways							
San Vicente Road	San Diego County	None	2	2003	14,200	CWR-0	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

San Vicente Road Transition Alternative construction impacts related to the disruption of rail traffic or operations (Impact T-6) would not occur because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The San Vicente Road Transition Alternative would be constructed underground crossing San Vicente Road. The San Vicente Road Transition Alternative would potentially cause temporary road and lane closures that would disrupt traffic flow during construction activities along roadways within the San Vicente Road Transition Alternative segment. Impacts to lane closures in the San Vicente Road Transition Alternative area would be significant (Class II) but mitigable to a level less than significant with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays because road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activities would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed or access to residences and businesses are denied. Potential roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction (e.g., San Vicente Road). SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System route 386 and local school bus routes would be impacted by this alternative. Construction of the San Vicente Road Transition Alternative could cause schedule delays if roadways near this alternative need to be shut down for prolonged length of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant because alternative routes and bus stops would be developed as necessary (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to a less than significant level because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to roadways by construction vehicles and equipment (line trucks, crew trucks, concrete trucks, etc.) would occur by vehicles entering and leaving roadways and underground construction of the transmission lines. This would be a significant impact (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E

has not suggested any applicant proposed measures for damaged roads; therefore, Mitigation Measure T-5a is recommended in order to ensure that the roads would be repaired and properly restored to the original condition. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to a less than significant level by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction. However, the area near the alternative is rural and parking should not be an issue during construction. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of San Vicente Road Transition Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along San Vicente Road could restrict access of private properties and businesses to residents and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over

the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

San Vicente Road Transition Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, affect parking capacity, increase road hazards and/or the level of service on the San Vicente Road Transition Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. San Vicente Road Transition Alternative operations for this segment would be less than significant (Class III).

D.9.17.4 Chuck Wagon Road Alternative

This alternative would diverge from the proposed route in San Vicente Boulevard, turning south in Chuck Wagon Road approximately 0.2 miles east of the proposed transition point at MP 121.7. It would continue south for approximately 1.6 miles before passing under the existing Creelman–Los Coches 69 kV transmission line ROW. At this point, the route would transition to overhead and turn west for approximately 1.2 miles to rejoin the proposed route at MP 125.6.

Environmental Setting

The Chuck Wagon Road Alternative would follow existing roads and transmission ROWs. The underground segment would turn south in Chuck Wagon Road, diverging from the Proposed Project route at MP 121.7. This alternative route would continue underground south in Chuck Wagon Road until it passes existing residences, then it would join the existing 69 kV Creelman to Los Coches line ROW, transitioning to an overhead transmission line. The Chuck Wagon Road Alternative would turn west to rejoin the proposed route at MP 125.6. After diverging from San Vicente Road, the only road that the Chuck Wagon Road Alternative crosses is Chuck Wagon Road.

Table D.9-36 lists the roads that potentially could be impacted by the Chuck Wagon Road Alternative route.

Table D.9-36. Public Roadways along the Alternative Route – Chuck Wagon Road Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
None							
Local Roadways							
Chuck Wagon Road	San Diego County	None	2	ND	—	CWR-0	Underground
San Vicente Road	San Diego County	None	2	2003	14,200	CWR-0	Underground

Source: California Department of Transportation; County of San Diego; County of Imperial; Linscott, Law & Greenspan Engineers.
N/A = Not applicable; ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction impacts to bus transit services (Impact T-3) would not occur because there are no transit routes along the Chuck Wagon Road Alternative. Construction impacts related to the disruption of rail traffic or operations (Impact T-6) of the Chuck Wagon Road Alternative would not occur because there are no rail operations in the area. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

This alternative would cause temporary road and lane closures which would disrupt traffic flow during underground construction activities. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential long-term lane closures. However, road and lane closures would still have a significant impact (Class II). Mitigation measures have been developed to ensure that significant impacts associated with temporary road and lane closures would not further disrupt traffic flow. Impacts to lane closures would be significant but mitigable to a less than significant level with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays. Road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity associated with the Chuck Wagon Road Alternative would interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed or access to residences and businesses is restricted. Potential roadway segments that would be most impacted would be two-lane roadways (e.g., San Vicente Road) that provide one lane of travel per direction (Chuck Wagon Road). SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service would be considered less than significant because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation would be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. There are no known pedestrian or bicycle paths located adjacent to the alternative route; however, pedestrians and bicyclists would likely move through the construction zone. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant because alternative pedestrian and bicycle routes would be established around the construction zone.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Unexpected damage to roadways by construction vehicles and equipment (line trucks, crew trucks, concrete trucks, etc.) would occur by vehicles entering and leaving roadways and underground construction of the transmission lines. This would be a significant impact (Class II). Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. SDG&E has not suggested any applicant proposed measures for damaged roads; therefore, Mitigation Measure T-5a is recommended in order to ensure that the roads would be repaired and properly restored to the original condition. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to employ physical road improvements such as construction/modification of roadways and repaving roadways. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to less than significant levels by requiring physical roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during construction activities. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Therefore, any elimination of parking spaces would not pose a significant impact because alternate parking would be provided. However, to ensure that parking is not unnecessarily impacted during construction, Mitigation Measure T-7a is recommended in order to notify the public of any loss in parking spaces and where alternative spaces can be found prior to any construction work, but not required because the impact is less than significant without mitigation.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Chuck Wagon Road Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along Chuck Wagon Road would potentially restrict access to private properties and businesses by residents and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Chuck Wagon Road Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on the Chuck Wagon Road Alternative roadways. However, The Chuck Wagon Road Alternative could impact air traffic.

The Ramona Airport is located two miles west of Ramona on Montecito Road. The airport is used by the U.S. Forest Service and the California Department of Forestry as a joint Air Attack Base. Air traffic patterns would potentially be affected by the placement of new structures or power lines because the alternative is within the Federal Aviation Administration (FAA) regulation of 20,000 feet for air space impact. According to the guidelines of the FAA, construction of the Alternative would have a significant impact on aviation activities if a structure, crane, or wire were to be positioned such that it would be more than 200 feet above the ground or if an object would penetrate the imaginary surface extending outward and upward from the public or military airport runway or a helipad. However, the Chuck Wagon Road Alternative would not extend into navigable airspace because the maximum heights of the transmission lines are not expected to reach 200 feet. Once SDG&E receives the appropriate permits from the FAA for the Airspace Obstruction Analysis there would be no aviation impacts associate with the Chuck Wagon Road Alternative and no mitigation measure would be required.

Chuck Wagon Road Alternative operations for this segment would be less than significant with appropriate permits and mitigation measures implemented (Class II).

D.9.18 Coastal Link Alternatives Impacts and Mitigation Measures

Four alternatives are considered within the Coastal Link: the Pomerado Road to Miramar Area North Alternative, the Los Peñasquitos Canyon Preserve and Mercy Road Alternative, the Black Mountain to Park Village Road Underground Alternative, and the Coastal Link System Upgrade Alternative.

This section describes the potential roadways that would be crossed or located adjacent to the alternative transmission line routes and substation in the Imperial Valley Link. The regional transportation route in this area is Interstate 15 (I-15), which is under the jurisdiction of Caltrans. All of the other roadways are under the jurisdiction of San Diego County.

D.9.18.1 Pomerado Road to Miramar Area North

This alternative would be underground with the exception of the east and west ends where the line is overhead within existing SDG&E transmission ROWs. This alternative would exit the Sycamore Substation at MCAS Miramar overhead westerly within an existing ROW toward Pomerado Road. The line would transition to underground beneath Pomerado Road in the vicinity of Legacy Road, then continuing underground in Miramar Road, Kearny Villa Road, Black Mountain Road, Activity Road, Camino Ruiz, Miralani Drive, Arjons Drive, Trade Place, Camino Santa Fe, Carroll Road/Carroll Canyon Road and Scranton Road. At the western end, the line would transition to overhead and would be located within the existing 230 kV ROW heading northward into the Peñasquitos Substation.

Environmental Setting

The Pomerado Road to Miramar Area North alternative is primarily underground with the exception of the east and west ends where the line is overhead within existing ROW. This alternative would exit the Sycamore Substation at MCAS Miramar overhead in a westerly direction within the existing ROW toward Pomerado Road. The line would transition to underground beneath Pomerado Road in the vicinity of Legacy Road. The line would be attached to the Pomerado/Miramar Road bridge that crosses over I-15 or on an overhead structure crossing I-15. The route would continue westward under Miramar Road, turn north on Kearny Villa Road, west on Black Mountain Road, west on Activity Road to Camino Ruiz. The line would continue underground north under Camino Ruiz, west on Miralani Drive and on Arjons Drive, south on Trade Place, west on Trade Street, south on Camino Santa Fe, and west on Carroll Road/Carroll Canyon Road to Scranton Road. At this location the line would transition to an overhead line and would be located within the existing 230 kV ROW heading northward into the Peñasquitos Substation. SDG&E and Caltrans would need to specify the construction techniques to be used at the Pomerado/Miramar Road/I-15 crossing.

The major roads that the Pomerado Road to Miramar Area North alternative would cross underground are Pomerado Road, Miramar Road, Kearny Villa Road, Black Mountain Road, Activity Road, Camino Ruiz, Miralani Drive, Arjons Drive, Trade Place, Trade Street, Camino Santa Fe, Carroll Road/Carroll Canyon Road, and then transition to overhead at Scranton Road.

Table D.9-37 lists the roads that potentially could be impacted by the Pomerado Road to Miramar Area North alternative route.

Table D.9-37. Public Roadways along the Alternative Route – Pomerado Road to Miramar Area North

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
Interstate 15 (I-15)	Caltrans	Freeway	4	—	—	—	Attached
Local Roadways							
Pomerado Road	City of San Diego	Major Arterial	4	2006	21,120	—	Overhead
Legacy Road	City of San Diego	Collector	2	—	—	—	
Miramar Road	City of San Diego	Prime Arterial	6	2005	73,240	—	
Kearny Villa Road	City of San Diego	Major Arterial	4	2005	14,880	—	
Black Mountain Road	City of San Diego	Major Arterial	4-6	2006	21,930	—	Underground
Activity Road	City of San Diego	Collector	2	2006	11,010	—	
Camino Ruiz	City of San Diego	Major Arterial	6	2006	27,090	—	
Miralani Drive	City of San Diego	Collector	2	2004	13,290	—	
Arjons Drive	City of San Diego	Collector	2	2003	11,950	—	
Trade Place	City of San Diego	Collector	2	2004	5470	—	
Trade Street	City of San Diego	Collector	2	2004	9000	—	
Camino Santa Fe	City of San Diego	Major Arterial	6	2005	23,960	—	
Carroll Road/Carroll Canyon Rd	City of San Diego	Prime Arterial	6	2006	24,290	—	
Scranton Road	City of San Diego	Collector	4	2005	20,530	—	

Source: California Department of Transportation; County of San Diego; City of San Diego.
ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Pomerado Road to Miramar Area North Alternative segment would potentially cause temporary road and lane closures which would disrupt traffic flow during construction activities. The Pomerado Road to Miramar Area North Alternative transmission line would be attached to the Pomerado/Miramar Road bridge crossing under I-15 or on an overhead structure crossing I-15 which would potentially cause temporary road and lane closures on I-15, a significant impact. However, SDG&E has committed to implement T-APM-2a and T-APM-2b, which would require SDG&E to obtain permits and develop detour plans for any potential lane closures. Impacts to lane closures of roadways in the Pomerado Road to Miramar Area North alternative segment would be temporary but significant (Class II); therefore, to ensure that roadways are not unnecessarily impacted during construction, Mitigation Measure T-1a is required to reduce the impact to a less than significant level.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity associated with the Pomerado Road to Miramar Area North Alternative would potentially interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed, or access to residences and businesses is restricted. Roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction. As this alternative is in an urban area, there are several roadways that would potentially be impacted; however, SDG&E has committed to implement T-APM-4a as part of the Proposed Project. Implementation of T-APM-4a would reduce the potential for temporary disruptions of emergency service provider operations emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures. Impacts to emergency service providers would be considered less than significant so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System routes 20, 20B, 31, 210, 921, 964, and DART, as well as, local school bus routes would be impacted by Pomerado Road to Miramar Area North Alternative. Overhead and underground construction would potentially cause transit and school bus schedule delays if roadways need to be shut down for any unspecified length of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities; therefore, impacts to bus transit services are considered less than significant because alternative routes would be established prior to construction activities (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle route are blocked. In urban areas pedestrian and bicycle safety impacts are more significant than they would be in rural areas, given that there is more regular pedestrian and bicycle movement. However, there are no known bicycle paths that are located adjacent to the alternative route but that does not mean that a pedestrian or bicyclist would not move through the construction zone. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public safety and health impacts remain less than significant. Implementation of Mitigation Measure T-4a would reduce these impacts to less than significant because alternative pedestrian and bicycle routes would be established around the construction zone for safe passage.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Where the alignment would be underground, roads would be dug up. In addition, there is a potential for unexpected damage to roads by underground construction, construction vehicles, and equipment along the Pomerado Road to Miramar Area North Alternative segment. Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. These would be significant impacts (Class II). SDG&E has not suggested any APMs for damaged roads; therefore, Mitigation Measure T-5a is established in order to ensure that the roads would be repaired and properly restored to pre-construction condition.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Although this alternative does not cross the Atchison, Topeka and Santa Fe railroad construction activities associated with the Pomerado Road to Miramar Area North Alternative, construction would impact rail traffic and operations on railroad if construction activities require closure of the railroad ROW. SDG&E has committed to implementing T-APM-8a as part of the Proposed Project, requiring SDG&E to obtain a permit to enter the railroad ROWs. By complying with the railroad company encroachment permit requirements, the impact of the Pomerado Road to Miramar Area North Alternative on rail traffic operations would be less than significant because protective measures would be part of the permit requirements (Class III). No additional mitigation measures are required.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which includes certain parking notification requirements and the development of a traffic control plan. Impacts to parking would be less than significant (Class III) because alternative parking spaces will be identified, if necessary.

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Pomerado Road to Miramar Area North Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along the Pomerado Road to Miramar Area North Alternative would potentially restrict access to private properties and businesses by residents and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Project operations and maintenance would have a less than significant impacts, with mitigation measures implemented, on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on the Pomerado Road to Miramar Area North Alternative roadways. However, this alternative would be within 1,000 of the Marine Corps Air Station Miramar. The Pomerado Road to Miramar Area North Alternative would be required to comply with all appropriate regulations of the U.S. Department of Defense (DoD) and the FAA including filling a Part 77 Airspace Obstruction Analysis. According to the guidelines of the FAA, construction of the Alternative would have a significant impact on aviation activities if a structure, crane, or wire were to be positioned such that it would be more than 200 feet above the ground or if an object would penetrate the imaginary surface extending outward and upward from the public or military airport runway or a helipad. However, the Pomerado Road to Miramar Area North alternative operations and maintenance would not extend into navigable airspace because the maximum heights of the transmission lines are not expected to reach the 200 feet threshold. Therefore, Pomerado Road to Miramar Area North Alternative operations and maintenance for this alternative would be less than significant with appropriate permits and mitigation measures implemented (Class II).

D.9.18.2 Los Peñasquitos Canyon Preserve–Mercy Road Alternative

This alternative route would bypass the Chicarita Substation and connect to existing ROW along Scripps Poway Parkway in the vicinity of Ivy Hill Drive. The line would then transition to underground and follow Scripps Poway Parkway/Mercy Road, Mercy Road, Black Mountain Road, and finally Park Village Drive, where the alternative route would rejoin the proposed route.

Environmental Setting

The Los Peñasquitos Canyon Preserve–Mercy Road Alternative would follow the Proposed Project to the intersection of Mercy Road where it would transition to an underground transmission line continuing under Mercy Road under the I-15 overpass. From I-15 the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would continue northward under Black Mountain Road. The transmission line would connect with the Proposed Project alignment underground at Black Mountain Road and Park Village Drive. This alternative would avoid Los Peñasquitos Canyon Preserve and reduces land use impacts within a residential community.

The Los Peñasquitos Canyon Preserve–Mercy Road Alternative would cross, underground, at Mercy Road, Black Mountain Road, and Park Village Drive where the alternative would rejoin the Proposed Project. Table D.9-38 lists the roads that potentially could be impacted by the Los Peñasquitos Canyon Preserve–Mercy Road Alternative route.

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction of the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would not have impacts related to the disruption of rail traffic or operations (Impact T-6) because there are no rail operations near this alternative. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Table D.9-38. Public Roadways along the Alternative Route – Los Peñasquitos Canyon Preserve–Mercy Road Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes		Structure No.	Transmission Line Orientation
				Year	ADT		
State and County Facilities							
Interstate 15 (North of Poway Rd)	Caltrans	Freeway	8-10	2005	223,000	—	Underground
Interstate 15 (South of Poway Rd)	Caltrans	Freeway	8-10	2005	250,000	—	Underground
Local Roadways							
Mercy Road	City of San Diego	Major Arterial	4	2005	18,770	—	Underground
Black Mountain Road	City of San Diego	Major Arterial	4-6	2006	21,930	—	Underground
Park Village Road	City of San Diego	Major Arterial	4	ND	ND	—	Underground

Source: California Department of Transportation; County of San Diego; City of San Diego.
ND – Data not available; ADT = Average Daily Traffic

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

The Los Peñasquitos Canyon Preserve–Mercy Road Alternative segment would cause temporary road and lane closures during underground construction, which would disrupt traffic flow. This would be a significant impact (Class II). The Los Peñasquitos Canyon Preserve–Mercy Road Alternative would cross under I-15 and other roadways within this alternative segment. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential lane closures. Mitigation Measure T-1a has been developed to ensure that temporary road and lane closures are less than significant with regard to traffic disruption. With implementation of this mitigation measures, impacts to road and lane closures along the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would be less than significant because the measure requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays. Road and lane closures would be restricted and detour plans would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity associated with the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would potentially interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed or access to residences and businesses is restricted. Roadway segments that would be most impacted would be two-lane roadways that provide one lane of travel per direction; however, the Los Peñasquitos Canyon Preserve–Mercy Road Alternative does not cross any two-lane roadways. Yet, as this alternative is in an urban area there are several roadways that would potentially be impacted. SDG&E has committed to implement T-APM-4a as part of the Proposed Project. Implementation of T-APM-4a would reduce the potential for temporary disruptions of emergency service provider operations because emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times. Impacts to emergency service providers would be considered less than significant (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Although there are Metropolitan Transit System and local school bus routes near the Los Peñasquitos Canyon Preserve–Mercy Road Alternative, the alternative does not cross any routes. However, overhead and underground construction would potentially cause transit and school bus schedule delays if roadways traversed by bus transit services needed to be shut down for a period of time. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities. Therefore, impacts to bus transit services are considered less than significant (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle route are blocked. In urban areas pedestrian and bicycle safety impacts are more significant than they would be in rural areas, given that there is more regular pedestrian and bicycle movement. Disruption of pedestrian and bicyclist use of these roadways would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure this potential impact to public health and safety is less than significant.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Underground construction would require digging up roads. In addition, there is a potential for unexpected damage to roads by construction activities, construction vehicles, and transport of equipment along the Los Peñasquitos Canyon Preserve–Mercy Road Alternative segment. These would be significant impacts (Class II). SDG&E has not suggested any applicant proposed measures for damaged roads; therefore, Mitigation Measure T-5a is recommended in order to ensure that the roads would be repaired and properly restored to the original condition. Mitigation Measure T-5a (Repair damaged roads) will require SDG&E to repair and restore road after construction. Mitigation Measure T-5a would reduce the impacts that construction vehicles and equipment would have on roads to a less than significant level by requiring roadway improvements to areas that are noticeably damaged.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during construction. However, parking on San Diego County maintained roads and highways is not permitted by law unless otherwise posted. Nevertheless, SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking would be less than significant because alternative parking spaces will be provided, if necessary (Class III).

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Los Peñasquitos Canyon Preserve–Mercy Road Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would potentially restrict access to private properties and businesses by residents and members of the public. SDG&E has committed to implement T-APM-10a as part of the Proposed Project. T-APM-10a requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to

private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Los Peñasquitos Canyon Preserve–Mercy Road Alternative operations and maintenance would have a less than significant impacts, with mitigation measures implemented, on traffic, movement, emergency access restrictions, on parking capacity, increase road hazards and/or the level of service on the Los Peñasquitos Canyon Preserve–Mercy Road Alternative roadways. However, the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would impact the Marine Corps Air Station Miramar. The Marine Corps Air Station Miramar is located in northern suburbs of San Diego and is one of the largest military bases in the area. The Los Peñasquitos Canyon Preserve–Mercy Road Alternative would be required to comply with all appropriate regulations of the U.S. DoD and the FAA including filling a Part 77 Airspace Obstruction Analysis. According to the guidelines of the FAA, construction of the Alternative would have a significant impact on aviation activities if a structure, crane, or wire were to be positioned such that it would be more than 200 feet above the ground or if an object would penetrate the imaginary surface extending outward and upward from the public or military airport runway or a helipad. However, the Los Peñasquitos Canyon Preserve–Mercy Road Alternative would not extend into navigable airspace because the maximum heights of the transmission lines are not expected to reach 200 feet. Once SDG&E receives the appropriate permits from the FAA for the Airspace Obstruction Analysis there would be no aviation impacts associate with the Los Peñasquitos Canyon Preserve–Mercy Road Alternative and no mitigation measure would be required. Therefore, Los Peñasquitos Canyon Preserve–Mercy Road Alternative operations for this segment would be less than significant with appropriate permits and mitigation measures implemented (Class II).

D.9.18.3 Black Mountain to Park Village Road Underground Alternative

This alternative would deviate from the Proposed Project alignment where the route approaches Black Mountain Road. Under this alternative, the line would remain underground but would be located underneath Black Mountain Road and would turn west onto Park Village Drive, following the project alignment into the Peñasquitos Substation via the Los Peñasquitos Canyon Preserve.

Environmental Setting

Black Mountain to Park Village Road Underground Alternative would deviate from the proposed alignment where the line approaches Black Mountain Road, and would be installed underground in the road rather than in the vacant ROW. The Black Mountain to Park Village Road Underground Alternative would be located farther from residences in the Rancho Peñasquitos community than the Proposed Project. The major roads that this alternative crosses underground are Black Mountain Road and Park Village Road.

Table D.9-39 lists the roads that potentially could be impacted by the Black Mountain to Park Village Road Underground Alternative route.

Table D.9-39. Public Roadways along the Alternative Route – Black Mountain to Park Village Road Underground Alternative

Roadway	Jurisdiction	Classification	Existing Lanes	Traffic Volumes			Transmission Line Orientation
				Year	ADT	Milepost	
State and County Facilities							
None							
Local Roadways							
Black Mountain Road	City of San Diego	Major Arterial	4-6	2006	21,930	—	Underground
Park Village Road	City of San Diego	Major Arterial	4	ND	ND	—	Underground

Source: California Department of Transportation; County of San Diego; City of San Diego.
ND = Data not available; ADT = Average Daily Traffic

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

Construction of the Black Mountain to Park Village Road Underground Alternative would not have impacts related to the disruption of rail traffic or operations (Impact T-6) because there are no rail operations near this alternative. Impacts related to the conflict with planned transportation projects (Impact T-8) would not occur as there are no known planned transportation projects in the area.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Underground construction will require the roadways and lanes to be closed. SDG&E has committed to implement T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any long-term closures. Such closures would be a significant impact (Class II). However, impacts due to road and lane closures along the Black Mountain to Park Village Road Underground Alternative would be mitigated to a less than significant level with implementation of Mitigation Measure T-1a because it requires SDG&E to plan lane closures for off peak hours and prepare detours that would allow for traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Construction activity associated with the Black Mountain to Park Village Road Underground Alternative would potentially interfere with emergency response by ambulance, fire, paramedic and police vehicles if roadways are blocked, lanes are closed or access to residences and businesses is restricted. Roadway segments that would be most impacted would be two-lane roadways that provide one lane of

travel per direction; however, this alternative does not cross any two-lane roadways. Nevertheless, SDG&E has committed to implement T-APM-4a as part of the Proposed Project. Implementation of T-APM-4a would reduce the potential for temporary disruptions of emergency service provider operations emergency service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times. Impacts to emergency service providers would be considered less than significant (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Metropolitan Transit System routes 20, 20B, 31, 210, 921, 964, and DART as well as local school bus routes would be impacted by the Black Mountain to Park Village Road Underground Alternative. Underground construction would cause transit and school bus schedule delays if roadways or lanes need to be closed. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the transit systems and affected school districts at least one month prior to construction to coordinate construction activities. Therefore, impacts to bus transit services are considered less than significant because alternative routes and bus stops would be established (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by construction activities if pedestrians and bicyclists are unable to pass through the construction zone or if established pedestrian and bicycle routes are blocked. There are no known bicycle paths that are located adjacent to the alternative route; however, in this urban setting pedestrians or bicyclist would still move through the construction zone. This would be a significant impact (Class II). SDG&E did not develop APMs for these pedestrian and/or bicycle circulation impacts. Therefore, Mitigation Measure T-4a was developed to ensure that public health and safety impacts would be less than significant.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

Underground construction would require digging up roads. In addition, there is a potential for unexpected damage to roadways by construction vehicles and equipment. These would be significant impacts (Class II). SDG&E has not suggested any APMs for damaged roads. Therefore, Mitigation Measure T-5a (Repair damaged roads) was developed to ensure that the roads would be repaired and restored to pre-construction condition. This would reduce the impacts that excavation and construction vehicles and equipment would have on roads to a less than significant level.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities will result in short-term elimination of parking spaces during construction activities. SDG&E has committed to implementing T-APM-6b as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan, including identification of replacement parking, if necessary. Impacts to parking would be less than significant (Class III).

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of Black Mountain to Park Village Road Underground Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to the alternative route segment. It would also divert traffic to other roads in the vicinity. Lane closures and other traffic control would be required. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Impact T-10: Underground construction could restrict access to properties and businesses (Class III)

Underground construction along Black Mountain to Park Village Road Underground Alternative would potentially restrict access to private properties and businesses by residents and members of the public. SDG&E has committed to implementing T-APM-10a as part of the Proposed Project. T-APM-10 requires SDG&E or contractors to lay a temporary steel plate over the trench in order to provide access to private properties or members of the public. Access shall be maintained at all times when underground construction is not occurring. Access issues along this alternative are considered adverse, but less than significant (Class III).

Operational Impacts

Black Mountain to Park Village Road Underground Alternative operations and maintenance would have a minimal effect on traffic, movement, emergency access restrictions, increased road hazards and/or the level of service on Black Mountain to Park Village Road Underground Alternative roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the alternative would not be within 1,000 feet of any airport or airfield. Project operations for the Black Mountain to Park Village Road Underground Alternative would be less than significant (Class III).

D.9.18.4 Coastal Link System Upgrade Alternative

The Coastal Link System Upgrade Alternative would be a system modification to install a third 230/69 kV transformer at the existing Sycamore Canyon Substation. Expansion of the Sycamore Canyon Substation would occur within the existing substation easement. Additionally, SDG&E would either (a) install a new 230/138 kV transformer at the existing Encina Substation or (b) upgrade (reconductor) the existing Sycamore Canyon-Chicarita 138 kV circuit using 34 existing wood frame structures.

Environmental Setting

Existing SDG&E ROW access roads and the regional roadway network provide access to the existing Sycamore Canyon Substation and the existing transmission facilities of Sycamore Canyon–Pomerado–Poway and Sycamore Canyon–Chicarita routes. The existing electrical facilities are operated by SDG&E, with the associated utility-line access roads and substation traffic for inspection and maintenance. The environmental setting for transportation and traffic along the Sycamore Canyon–Chicarita portion of the alternative is the same as the Proposed Project, which is described in Section D.9.2.5. The transportation and traffic setting for the Sycamore Canyon–Pomerado–Poway lines are described below. Poway Road (S4) and Scripps Poway Parkway, which are included in the Proposed Project setting, also pertain to the setting of the Sycamore Canyon–Pomerado–Poway transmission lines. Table D.9-40 lists the roads that potentially could be impacted by the Coastal Link System Upgrade Alternative.

Poway Road is a six-lane Prime Arterial east of Interstate 15. The posted speed limit is generally 50 mph.

Scripps-Poway Parkway is classified as a six-lane Major Arterial in the City of San Diego Community Plan. The posted speed limit is generally 50 mph.

Stonebridge Parkway is two-lane undivided roadway east of Pomerado. The adjacent land uses are mainly residential.

Beeler Canyon Road is currently built as a two-lane undivided roadway east of Pomerado.

Kirkham Way is currently built as a four-lane roadway with a two way left-turn lane. The posted speed limit on Kirkham Way is generally 45 mph.

Stowe Drive is currently built as a four-lane roadway with a two-way left turn lane east of Pomerado Road. The posted speed limit is generally 45 mph.

Twin Peaks Road is classified in the *Poway Transportation Element* as a Prime Arterial east of Pomerado Road. Its classification changes to a Major Arterial east of Community Road, which is approximately 1.5 miles east of Pomerado Road. It is currently a six-lane divided roadway west of Pomerado Road, a four-lane divided roadway between Pomerado Road and Ted Williams Parkway, and a four-lane undivided roadway with a two-way left-turn lane east of Ted Williams Parkway. The posted speed limit is 50 mph west of Pomerado Road and 45 mph east of Pomerado Road. Bike lanes are provided in both directions and curbside parking is prohibited. The adjacent land uses east of Ted Williams Parkway are mainly residential, and are primarily commercial and office to the west of Ted Williams Parkway.

Environmental Impacts and Mitigation Measures

Note that the text of a mitigation measure is written out the first time it appears in the Transportation and Traffic section. Thereafter, only the mitigation measure number and title are provided. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Construction Impacts

The Coastal Link System Upgrade Alternative would eliminate the impacts associated with the Proposed Project segment between Sycamore Canyon and Peñasquitos Substations. Operation and maintenance of the alternative would be the same as the existing line and thus would not create additional impacts to

transportation and traffic. Because there are no railway operations, planned transportation projects or proposed underground construction, impacts T-6, T-8, and T-10 do not apply.

Table D.9-40. Roadway Level of Service Operations – Coastal Link System Upgrade Alternative

Roadway	Jurisdiction	LOS Capacity	Existing			Existing & Proposed Project Construction-Related Traffic			
			ADT ^a	LOS ^b	V/C ^c	ADT	LOS	V/C	Δ ^d
Poway Road	City of San Diego/ City of Poway	60,000	36,500	C	0.608	36,868	C	0.614	0.006
Scripps-Poway Parkway	City of San Diego/ City of Poway	50,000	42,400	D	0.848	42,768	D	0.855	0.007
Stonebridge Parkway	City of San Diego	8000	5000 ^e	D	0.625	5368	D	0.671	0.046
Beeler Canyon Road	City of Poway	8000	1000 ^e	A	0.125	1368	A	0.171	0.046
Kirkham Way	City of Poway	15,000	10,000 ^e	D	0.666	10,368	D	0.691	0.025
Stowe Drive	City of Poway	15,000	10,100	D	0.673	10,468	D	0.698	0.025
Twin Peaks Road	City of Poway	60,000	35,200	C	0.587	35,568	D	0.593	0.006

a. Average daily traffic.

b. Level of service; measure of roadway congestion, ranging from A (free flowing) to F (highly congested)

c. Volume to capacity ratio.

d. Δ denotes an increase in delay due to project.

e. Estimated ADT.

Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow (Class II)

Reconductoring and transmission line stringing operations will require roadways along this alternative to be temporarily closed for unspecified periods. SDG&E has committed to implementing T-APM-2a and T-APM-2b as part of the Proposed Project, which would require SDG&E to obtain permits and develop detour plans for any potential lane closures. However, lane and road closures would be a significant impact (Class II). Impacts to road and lane closures would be mitigated a less than significant level with implementation of Mitigation Measure T-1a, which requires SDG&E to plan lane closures during off peak hours and prepare detour routes to reduce traffic delays. Thus road and lane closures would be restricted and detours would allow traffic to be rerouted around the construction zone.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Impact T-2: Construction would temporarily disrupt the operation of emergency service providers (Class III)

Overhead construction activity would interfere with emergency response by ambulance, fire, paramedic and police vehicles. SDG&E has committed to implement T-APM-4a as part of the Proposed Project, which will reduce the potential for temporary disruptions of emergency service provider operations. Impacts to emergency service providers would be considered less than significant because emergency

service providers would be aware of any potential delays, lane closures, and/or roadway closures so that alternative routes and adjustments to service areas and destinations would be developed as necessary to maintain emergency service coverage and response times (Class III).

Impact T-3: Construction would temporarily disrupt bus transit services (Class III)

Construction of the Coastal Link System Upgrade would cause minor schedule delays during stringing operations across roadways. SDG&E has committed to T-APM-5a as part of the Proposed Project, which requires SDG&E to consult with the affected transit systems and school districts at least one month prior to construction to coordinate construction activities. Impacts to bus transit services are considered less than significant because alternative routes and bus stops will be developed (Class III).

Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety (Class II)

Pedestrian and bicycle circulation could be affected by transmission line construction if pedestrians and bicyclists were unable to pass through the construction zone or if established pedestrian and bicycle route were blocked. There are no known bicycle paths that would be affected by the alternative; however, in an urban setting pedestrians or bicyclists could move through the construction zone. This would be a significant impact (Class II). Implementation of Mitigation Measure T-4a would ensure that potential impacts to public health and safety are less than significant.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area (Class II)

There is a potential for unexpected damage to roadways from construction vehicles and/or equipment. Construction traffic or equipment movement would be considered a significant impact if there is an increase in the wear on roadways, resulting in noticeable deterioration of roadway surfaces or other features in the road ROW. This would be a significant impact (Class II). Implementation of Mitigation Measure T-5a would ensure that the roads would be repaired and properly restored to the original condition, thereby reducing this impact to a less than significant level.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would potentially cause physical damage to roads in the project area

T-5a Repair damaged roads.

Impact T-6: Construction activities would cause a temporary disruption to rail traffic or operations (Class III)

Overhead construction activities would interfere with rail traffic if construction of overhead transmission lines would require temporary closure of railroad ROWs. SDG&E has committed to implementing T-APM-8a as part of the Proposed Project, requiring SDG&E to obtain encroachment permits to enter the railroad ROWs. By complying with the railroad company permit requirements (e.g., protective shields), the impact on rail traffic operations would be less than significant (Class III) because protective measures are incorporated into the encroachment permits.

Impact T-7: Construction would result in the short-term elimination of parking spaces (Class III)

Construction activities may result in short-term elimination of parking spaces during staging operations. However, existing SDG&E access roads provide areas for staging, and parking would be available at existing substations during construction. SDG&E has committed to implementing T-APM-6a as part of the Proposed Project, which specifies certain parking requirements and the development of a traffic control plan. Impacts to parking spaces would be less than significant because alternative parking be established identified in the traffic control plan (Class III).

Impact T-9: Construction would generate additional traffic on the regional and local roadways (Class II)

Construction of the Coastal Link System Upgrade Alternative would temporarily increase traffic on the regional and local roadways through construction worker commute trips, project equipment deliveries, and hauling materials to each alternative route segment and substation. These impacts would be significant in relation to the existing traffic load (Class II). To ensure that regional traffic impacts during construction are less than significant, Mitigation Measure T-9a would be implemented. This measure would address this impact through preparation and implementation of a Construction Transportation Management Plan (CTMP) approved by the counties and Caltrans, as appropriate.

Mitigation Measure for Impact T-9: Construction would generate additional traffic on the regional and local roadways

T-9a Prepare Construction Transportation Management Plan.

Operational Impacts

Operation and maintenance of the alternative would have a minimal effect on traffic, movement, emergency access restrictions, parking capacity, increase road hazards and/or the level of service on roadways. Air traffic patterns would not be affected by the placement of new structures or power lines because the project would not be within 1,000 feet of any airport or airfield. Operation of the upgraded transmission system would be less than significant (Class III).

D.9.19 Top of the World Substation Alternative Impacts and Mitigation Measures

The Top of the World Substation Alternative would be located on Vista Irrigation District land approximately one mile west of the proposed Central East Substation. It would be an alternative to the proposed substation location. The transmission line into the Top of the World Substation would follow the Proposed Project route to approximately MP 92.7, then the alternative 500 kV route would turn west for 1.1 miles to enter the alternative site. Exiting the substation, the transmission line would travel southwest for 400 feet and then west and north-northwest to rejoin the Proposed Project at approximately MP 95.3. The first part of the access to the alternative site would be the same route described in Section D.9.7 for the Central East Substation. From the proposed Central East Substation site, the access would continue along a new access road that would be required to reach the Top of the World site. The full text of all mitigation measures, including those for transportation and traffic impacts, is provided in Appendix 12 as well.

Environmental Setting

The proposed substation alternative near the community of San Felipe, west of S2 and approximately 2 miles southwest of the intersection of S2 and S22. Construction of the substation would take approximately 8 months to complete all necessary construction activities including excavation, grading, and below and above grade installations, among other activities on the acre site.

Construction Impacts

Access to the substation site would be from San Felipe (S2). Substation construction would temporarily increase traffic and would require constructing new access roads to the substation. SDG&E has committed to implementing T-APM-2a, T-APM-2b, T-APM-4a, T-APM-5a, and T-APM-6a as part of the Proposed Project, which would help limit the potential traffic impacts near the Top of the World Substation Alternative by coordinating with local authorities prior to construction in order to avoid potential traffic impacts. There are no rail or bus services near the proposed substation (Impacts T-6 and T-3). There are no known planned transportation projects that would conflict with the construction of the substation (Impact T-8). Construction equipment could cause temporary road and lane closures that could disrupt traffic flow on S2 (Impact T-1) or disrupt operation of emergency service providers (Impact T-2). Construction activities could disrupt pedestrian movement and safety on local roads (Impact T-4), could restrict access to properties (Impact T-10), damage local roads (Impact T-5), and could reduce parking in the area (Impact T-7). If construction requires an encroachment permit, the permit requirements would be specified by the agency having jurisdiction. Enforcement of the terms of an encroachment permit would reduce impacts associated with short-term road closures. Based on its location, impacts from construction of the substation would be less than significant (Class III). However, traffic mitigation measures identified below are recommended to further ensure impacts are minimized.

Mitigation Measure for Impact T-1: Construction would cause temporary road and lane closures that would temporarily disrupt traffic flow

T-1a Restrict lane closures.

Mitigation Measure for Impact T-4: Construction would temporarily disrupt pedestrian and/or bicycle circulation and safety

T-4a Ensure pedestrian and bicycle circulation and safety.

Mitigation Measure for Impact T-5: Construction vehicles and equipment would cause physical damage to roads in the project area

T-5a Repair damaged roads.

Mitigation Measure for Impact T-7: Construction would result in the short-term elimination of parking spaces

T-7a Notify public of potential short-term elimination of parking spaces.

Operational Impacts

The potential impacts associated with operation of the substation alternative would be similar to those described for the proposed Central East Substation. SDG&E would need to inspect and maintain the substation throughout the year. It is assumed that one or two light duty trucks would travel to the substation on a weekly basis. Overall, operations would have a less than significant impact on traffic, cir-

culatation, and/or the level of service on nearby roadways (Class III) because the regional and local roadway LOS would not decrease due to operation of the substation.

D.9.20 Mitigation Monitoring, Compliance, and Reporting Table

Table D.9-41 presents the mitigation monitoring, compliance and reporting table for Transportation and Traffic. Mitigation measures not originating in this section do not appear in the table; they appear only in the mitigation monitoring, compliance and reporting table for the section in which they were originally recommended. For a summary of all impacts and their respective mitigation measures, please see the Impact Summary Tables at the end of the Executive Summary.

Sections D.9.11 and D.9.12 recommend mitigation measures for the projects described under Future Transmission System Expansion and Connected Actions/Indirect Effects. Those mitigation measures are presented for consideration by the agencies that will issue permits for construction of the connected and future projects. Because those projects would not be constructed as a result of approval of the Sunrise Powerlink Project, the recommended mitigation measures are not included in this mitigation monitoring table.

Table D.9-41. Mitigation Monitoring Program – Transportation & Traffic

MITIGATION MEASURE	T-1a: Restrict lane closures. SDG&E shall restrict all necessary lane closures or obstructions on major roadways associated with overhead or underground construction activities to off-peak periods in congested areas to reduce traffic delays. Lane closures must not occur between 6:00 and 9:30 a.m. and between 3:30 and 6:30 p.m., unless otherwise directed in writing by the responsible public agency issuing the encroachment permit.
Location	All areas requiring road or lane closure.
Monitoring / Reporting Action	Review plan for road or lane closure to make sure that it is outside periods of peak traffic volume
Effectiveness Criteria	Road or lane closures shall not be executed during periods of peak traffic volume. Only reasonable interference with traffic flow.
Responsible Agency	CPUC, BLM and affected agencies responsible for streets/highways and traffic
Timing	Scheduling of road or lane closure shall take place prior to construction
MITIGATION MEASURE	T-2a: Coordinate with Emergency Service Providers. SDG&E shall coordinate in advance with emergency service providers to avoid restricting movements of emergency vehicles. The counties and cities will then notify respective police, fire, ambulance and paramedic services. SDG&E shall notify counties and cities of the proposed locations, nature, timing and duration of any construction activities and advise of any access restrictions that could impact their effectiveness.
Location	All areas requiring road or lane closure
Monitoring / Reporting Action	Document coordination with providers, including providing them a construction schedule
Effectiveness Criteria	Evidence of coordination
Responsible Agency	CPUC, BLM and affected local emergency service providers
Timing	Prior to any construction requiring road or lane closures
MITIGATION MEASURE	3a: Consult with bus and transit services. SDG&E shall consult with the County Offices of Education, and any affected local school district at least one month prior to construction to coordinate construction activities adjacent to school bus routes and stops. If necessary, school bus stops will be temporarily relocated or buses will be rerouted until construction in the vicinity is complete. SDG&E will also consult with Imperial Valley Transit, Metropolitan Transit System and any other affected transit system at least one month prior to construction to reduce potential interruption of transit services. [T-APM-5a]
Location	All areas requiring road or lane closure, or that would be adjacent to service routes.
Monitoring / Reporting Action	Document coordination with providers, including provision of a construction schedule

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Effectiveness Criteria	Evidence of required coordination
Responsible Agency	CPUC, BLM and affected local school districts and transit service providers
Timing	Prior to any construction requiring road or lane closures
MITIGATION MEASURE	T-4a: Ensure pedestrian and bicycle circulation and safety. Where construction will result in temporary closures of sidewalks and other pedestrian facilities, SDG&E shall provide temporary pedestrian access, through detours or safe areas along the construction zone. Where construction activity will result in bike route or bike path closures, appropriate detours and signs shall be provided.
Location	All locations where closures of sidewalks and other pedestrian facilities are expected during construction of the project
Monitoring / Reporting Action	Review and approve Construction Transportation Management Plan prepared by SDG&E for identified affected pedestrian facilities and the alternative facilities or detours that will be provided
Effectiveness Criteria	No interference with pedestrian/bicycle circulation or provision of detours
Responsible Agency	CPUC, BLM and the local jurisdictions
Timing	Prior to and during construction
MITIGATION MEASURE	T-5a: Repair roadways damaged by construction activities. If damage to roads, occurs, SDG&E shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired at SDG&E's cost. Roads disturbed by construction activities or construction vehicles shall be properly restored to ensure long-term protection of road surfaces. Care shall be taken to prevent damage to roadside drainage structures. Roadside drainage structures and road drainage features (e.g., rolling dips) shall be protected by regarding and reconstructing roads to drain properly. Said measures shall be incorporated into an access agreement/easement with the applicable governing agency prior to construction.
Location	All roads used to access the construction sites
Monitoring / Reporting Action	Review documentation to ensure that SDG&E obtained permits for construction within each road ROW prior to construction. Verify that each affected roadway has been satisfactorily restored and/or reconstructed within 30 days of the end of the construction.
Effectiveness Criteria	Restoration/maintenance of roads to pre-construction conditions as determined by the affected public agency.
Responsible Agency	CPUC, BLM and affected jurisdictions
Timing	After construction is completed on each affected roadway
MITIGATION MEASURE	T-6a: Obtain railroad right-of-way permit. SDG&E shall obtain ROW encroachment permits for entering and/or construction on or near Union Pacific Railroad, San Diego & Arizona Eastern Railroad, U.S. Gypsum Mine and any other railroad ROW entered.
Location	All areas requiring access to railroad ROW.
Monitoring / Reporting Action	Evidence of permit being issued prior to encroaching on ROW
Effectiveness Criteria	Obtaining permits prior to encroachment on ROW
Responsible Agency	CPUC, BLM and affected railroad operators and owners
Timing	Construction in ROW scheduling shall take place prior to encroachment
MITIGATION MEASURE	T-7a: Notify public of potential short-term elimination of parking spaces. As required in Mitigation Measure L-1a, prior to any construction activity on major roadways, SDG&E shall notify the public of the potential for parking spaces to be temporarily eliminated and where temporary parking spaces will be relocated through multiple media such as local newspapers and on-site postings. The elimination and relocation of parking spaces must be in conformance with the requirements of agencies responsible for parking management.
Location	All locations where construction could significantly impact parking spaces.
Monitoring / Reporting Action	Copies of public notices; evidence of coordination with affected jurisdiction

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Effectiveness Criteria	Alternative parking spaces are provided, if required
Responsible Agency	Imperial and San Diego Counties and local municipalities
Timing	Prior to construction in affected jurisdiction
MITIGATION MEASURE	T-9a: Prepare Construction Transportation Management Plan. SDG&E shall prepare a Construction Transportation Management Plan (CTMP) to address traffic and transportation issues related to project construction. The CTMP shall describe alternate traffic routes, timing of worker commutes and material deliveries, the need for lane and road closures, the use of helicopters, plans for construction worker parking and transportation to work sites, methods for keeping roadways clean, and other methods for reducing adverse construction-related traffic impacts on regional and local roadways. The plan must comply with the requirements of the respective county and must be submitted to the respective counties and Caltrans for approval prior to commencing construction activities.
Location	All locations where construction could significantly impact regional and local roadways.
Monitoring / Reporting Action	Review Construction Transportation Management Plan
Effectiveness Criteria	Traffic flows are generally maintained without severe congestion
Responsible Agency	CPUC, BLM, and the applicable local jurisdictions
Timing	Prior to and during construction
MITIGATION MEASURE	T-10a: Ensure access to properties and businesses. SDG&E or its construction contractors shall provide at all times the ability to quickly lay a temporary steel plate trench bridge upon request in order to ensure driveway access to businesses and residences and shall provide continuous access to properties when not actively constructing the underground cable alignment.
Location	All areas requiring underground trenching that would block access.
Monitoring / Reporting Action	Ready availability of materials and workers to effectuate required access. Non-work period covering of trenches.
Effectiveness Criteria	Covering trenching during non-work hours to permit access. Availability of steel plates and necessary workers and equipment to provide rapid access during work hours.
Responsible Agency	CPUC, BLM and affected land owners and users
Timing	When access to adjacent property is cutoff by trenching

D.9.21 References

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